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Summary of Marine Tagging Studies of Atlantic Salmon (Salmo salar L.) in the Northwest Atlantic Area

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SUMMARY OF MARINE TAGGING STUDIES OF ATLANTIC SALMON (SALMO SALAR L.) IN THE NORTHWEST ATLANTIC AREA

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ABSTRACT

Reddin, D. G., and W. H. Lear. 1990. Summary of marine tagging studies of Atlantic salmon (Salmo salar L.) in the Northwest Atlantic area. Can. Tech. Rep. Fish. Aquat. Sci. 1737: iv + 115 p.

Between 1940 and 1977, numerous tagging studies on adult Atlantic salmon (Salmo salar) were carried out to learn more about the migration patterns and origins of stocks in the coastal waters of Newfoundland and Labrador and in the Labrador Sea. This paper provides a summary for each tagging site of the number of salmon tagged and recaptured. A brief description is given of the composition of stocks exploited by the Newfoundland and Labrador commercial fishery, the utilization of these stocks, and general migration patterns. In total, 3495 salmon of various sea ages have been tagged and released and there have been 892 (26%) reported recaptures. Recaptures occurred in commercial and recreational fisheries in Newfoundland and Labrador, New Brunswick, Nova Scotia, Quebec, Greenland, Ireland and Scotland.

RÉSUMÉ

Reddin, D. G., and W. H. Lear. 1990. Summary of marine tagging studies of Atlantic salmon (Salmo salar L.) in the Northwest Atlantic area. Can. Tech. Rep. Fish. Aquat. Sci. 1737: iv + 115 p.

Entre 1940 et 1977, on a réalisé de nombreuses études de marquage sur des saumons de l'Atlantique (Salmo salar) adultes, dans le but de mieux connaître les habitudes migratoires et l'origine des stocks évoluant dans les eaux côtières de Terra-Neuve et du Labrador ainsi que dans la mer du Labrador. Le présent document brosse un tableau du nombre de saumons étiquetés et recapturés, par site d'étiquetage. De plus, il décrit brièvement la composition des stocks exploités par les pêcheurs commerciaux de Terra-Neuve et du Labrador, l'utilisation de ces stocks et leurs habitudes migratoires générales. En tout, on a étiqueté et remis à l'eau 3495 saumons à divers stades de leur phase en mer. Le nombre de recaptures déclarées a été de 892, soit 26 p. 100. Les saumons en question ont été repris par des pêcheurs commerciaux et par des pêcheurs sportifs de Terre-Neuve et du Labrador, du Nouveau-Brunswick, de Nouvelle-Écosse, du Québec, du Groenland, d'Irlande et d'Écosse.

INTRODUCTION

Atlantic salmon (Salmo salar L.) populations are found in many rivers throughout insular Newfoundland and in Labrador north to Anaktalik Brook at 56°29'N 62°09'W (Anderson 1985). In 1987, there were 173 rivers in Schedule II of the Newfoundland Fisheries Regulations identified as salmon rivers (scheduled rivers) out of a total of 310 rivers. Many rivers, particularly in Labrador, contain salmon populations but are not scheduled rivers. Historical records indicate that the coastal fisheries began for salmon in the mid to late 1800s (Taylor 1985). Landings in the commercial fishery peaked in 1930 at 8920 t and more recently, average landings from 1971 to 1987 were 1522 t (Anon. 1988). Historically, salmon catches in Newfoundland and Labrador have constituted a large proportion of the total Canadian landings. Mean Canadian landings from 1971 to 1987 were 1939 t (Anon. 1988), of which the Newfoundland and Labrador portion is 78%.

As early as the 1930s, it was recognized that at least some of the Newfoundland and Labrador coastal fisheries were harvesting salmon distant from their rivers of origin (Belding 1939). Murray (1968) demonstrated that salmon originating in the Little Codroy River on the southwest coast of Newfoundland were widely distributed around the island. Results of a smolt tagging study on the Sand Hill River, Labrador indicated that, in addition to being caught in Labrador, salmon originating from this river were also caught in Newfoundland (Pratt et al. 1974). Subsequent studies have shown that in addition to Newfoundland and Labrador origin salmon, some salmon from stocks in the USA, Nova Scotia, New Brunswick, and Quebec frequent, in varying proportions, the waters off Newfoundland and Labrador (Murray 1966; Pippy 1982; Anon. 1988). A subsequent analysis, based on tag releases during the period 1968-73 and average catch distribution for 1969-75, showed that 24% of the total salmon caught in the Newfoundland and Labrador fishery originated from mainland Canada (Pippy 1982).

Beginning in 1940, the Newfoundland Commission of Government (1940-49), and since 1949 the Canadian Department of Fisheries and Oceans and its predecessors (1949 to present), have conducted in excess of 50 investigations involving the tagging of adult salmon in the coastal waters of Newfoundland and Labrador and in the Labrador Sea. While the objectives of these investigations have been numerous, they can generally be grouped into three main ones, namely: 1) to determine the stock composition of populations exploited in various coastal areas; 2) to determine utilization of these stocks; and 3) to determine distribution, feeding areas and migration patterns. The results of many of these studies are not available in the literature, yet they provide useful information for understanding the marine life of Atlantic salmon and the dynamics of the Newfoundland and Labrador commercial fisheries (Blair 1956; Blair 1957a and b). This report summarizes the results of tagging projects conducted in the coastal waters of Newfoundland and Labrador and the Labrador Sea from 1940 to 1977. Also some general observations are made on stock composition of the fisheries, utilization of stocks, and migration patterns.

METHODS

During the period from 1940 to 1977, adult salmon were tagged at 27 sites in the coastal waters of Newfoundland, 13 sites in Labrador, and 12 sites in the Labrador Sea area of the Northwest Atlantic Ocean (Fig. 1). Tagging sites are numbered in geographical order beginning on the west coast of Newfoundland and continuing counter-clockwise around the island and then northwards along the coast of Labrador (Fig. 1). Longitudes and latitudes are provided for those tagging experiments where gear was set out at several locations. In the figures, the tagging site is identified with an open circle containing the number of salmon tagged and released (Fig. 2-39). Other symbols on the figures identify the location of recapture, the sea ages, and the number of years that the recapture occurred after tagging. In the tables the symbol S refers to recapture in the sea and R refers to a recapture in a river.

FISHING GEAR

Over the years a variety of research vessels both chartered and government owned were used, ranging in size from small open boats to large offshore vessels. Different types of fishing gear were used including nets constructed of cotton and nylon multifilament and nylon monofilament twine of mesh sizes ranging from 114 mm to 160 mm length of mesh opening. Trap nets of various types and materials have also been used. These gears have been set fastened to the shore and allowed to drift. Baltic longlines, set in the upper 10 m near the surface of the water, were also used on occasion.

TAGGING TECHNIQUES

Since the 1940s a variety of tagging techniques have been used. The type of tag and method of attachment is provided in the Tables in addition to the results of each tagging project. The following description provides general information on the technique most frequently used. Salmon were removed from the nets by cutting mesh with scissors, released into a small tank in the tagging boat, and held for a short recovery period prior to tagging. The tag was applied by inserting a double hollow needle through the dorsal musculature just below the anterior base of the dorsal fin; wires were then inserted into the needles, needles removed, and wires pulled tight and twisted leaving enough free wire for growth. The tag usually was placed so that it hung from the left side of the fish. The type of tag most commonly used was a Carlin tag 15 mm x 5 mm x 0.8 mm and wired with a 0.3 mm stainless steel wire. Other types of tags, sizes of tags, and methods of attachment were also used. The return address was on one side of the tag and a notice of reward and tag number were on the other side. Posters notifying fishermen of the reward were placed in Post Offices throughout Newfoundland and Labrador.

Tagged fish were sampled for fork length (nearest cm) and in recent years scale samples were removed from the left side of the fish from three to six scale rows above the lateral line on a line extending from the posterior edge of the base of the dorsal fin to the anterior edge of the anal fin. Impressions of the scales were made on plastic slides and from these impressions, the freshwater and sea ages were determined. The terminology used to describe life-history stages of Atlantic salmon in this report is that

recommended by Allan and Ritter (1977). The stages are: 1-sea-winter (1SW), 2-sea-winter (2SW), 3-sea-winter (3SW), and multi-sea-winter (MSW) salmon that had previously spawned (PS).

RESULTS AND DISCUSSIONS

WEST COAST

Site 1. St. George's Bay, 1976

In St. George's Bay in 1976, a single 2SW salmon was tagged and released. This salmon was subsequently recaptured in St. George's Bay (Table 1, Fig. 2). The river age of this salmon was three years.

SOUTH COAST

Site 2. Port aux Basques, 1969

Near Port aux Basques in 1969, there were 250 salmon tagged and released (Table 2). The tagging sites ranged from 4 to 8 nautical miles offshore. Of the salmon tagged and released, 106 (42%) were recaptured. Two out of three (67%) recaptures of 1SW salmon and 22 out of 83 (27%) 2SW salmon recaptures were in Newfoundland. Salmon of other sea-age classes were recaptured mainly in the Maritime Provinces and Quebec (Fig. 3). The river ages of the tagged fish were mainly three and four years with mean river ages ranging from 3.0 years for previously spawned salmon to 3.3 years for 2SW salmon.

Site 3. Port aux Basques, 1976

Near Port aux Basques in 1976, there were 214 salmon tagged and released (Table 3). The tagging sites ranged from nearshore to 5 nautical miles offshore. Of the salmon tagged and released, 35 (16%) were recaptured. Three out of four (75%) 1SW salmon were recaptured in Newfoundland and two out of 28 (7%) 2SW salmon were recaptured in Newfoundland. One of the 2SW salmon was recaptured to the east of the tagging site (Fig. 4). Three of 12 (25%) salmon of other sea ages tagged and released were recaptured in the Maritime Provinces and Quebec. The river ages of the tagged salmon were mainly two, three, and four years with a mode of three years.

Site 4. Burgeo Bank, 1977

On Burgeo Bank in 1977, there were four salmon tagged of which there were no recaptures. The river ages of these salmon ranged from two to four years (Table 4).

Site 5. Fortune Bay, 1976

In Fortune Bay in 1976, there were 39 salmon tagged and released (Table 5). Of these, three (8%) were recaptured, two in Fortune Bay and the other in the Maritimes (Fig. 5). The mean river age of the 1SW salmon was 3.1 years.

Site 6. Fortune Bay, 1977

In Fortune Bay in 1977, there were 51 salmon including one 0+ post-smolt tagged and released (Table 6). Of these, 12 (24%) have been recaptured, all of them in Fortune Bay (Fig. 6). The mean river age of the 1SW salmon was 3.2 years and 3.3 years for the previous spawners.

Site 7. Point Creve, 1973

Near Point Creve in 1973, a single 2SW salmon was tagged and released and subsequently recaptured in the sea in Newfoundland (Table 7). The river age of this salmon was 2.0 years.

Site 8. St. Lawrence, 1973

Near St. Lawrence in 1973, there were 129 1SW and MSW salmon tagged and released (Table 8). Of these, 32 (25%) were recaptured, most of them well away from the tagging site near St. Lawrence (Fig. 7). Two of the four 1SW salmon recaptured were caught in Newfoundland (Fig. 7). Of the 25 2SW salmon recaptured, 12 (48%) were caught in Newfoundland. Most of the 2SW recaptures in Newfoundland were caught in the area from Burgeo to Port aux Basques. The mean river ages of the tagged salmon ranged from 2.3 for 1SW salmon to 3.0 years for 2SW salmon.

Site 9. Placentia Bay, 1975

In Placentia Bay in 1975, 452 salmon were tagged and released (Table 9). Of these, 103 (23%) have been recaptured, most of them in Newfoundland (Fig. 8). Most of the salmon tagged and released were 1SW in age and, of these, 93 were recaptured but only three (3%) were recaptured outside of Newfoundland. Although most of the recaptures occurred in Placentia Bay, there were recaptures to the west of the tagging site almost to Burgeo and as far east as St. Mary's Bay and along the northeast coast as far north as St. Anthony. A single 1SW salmon was recaptured in a river on the northwest coast. Out of the 10 2SW salmon recaptured, only one was caught outside of Newfoundland. Mean river age ranged from 2.2 years for previous spawners to 2.9 years for 1SW salmon.

Site 10. Cape Pine, 1973

Near Cape Pine in 1973, six salmon were tagged and released (Table 10). Of these, three (50%) have been recaptured, none of them in the area of tagging (Fig. 9). The mean river age of the tagged fish was 2.3 years.

EAST COAST

Site 11. Renews, 1973

Near Renews in 1973, 67 salmon were tagged and released (Table 11). Of these, 16 (24%) have been recaptured, nine of them in Newfoundland. Out of 36 1SW salmon tagged and released, 11 (31%) have been recaptured, eight in Newfoundland and three in the Maritimes. Of the 30 2SW salmon tagged and released, five (17%) were recaptured, one in Newfoundland, two in the Maritimes and two in Quebec (Fig. 10). The mean river ages of the tagged salmon ranged from 2.9 years for 2SW salmon to 3.0 years for 1SW salmon.

Site 12. Cape Broyle, 1949

Near Cape Broyle in 1949, 63 salmon were tagged and released (Table 12). Of these, eight 2SW salmon were recaptured. Two of the eight (25%) recaptures occurred in the Maritimes (Fig. 11). The mean river ages of the tagged salmon were unavailable.

Site 13. Conception Bay, 1974

In Conception Bay in 1974, 160 salmon were tagged and released (Table 13). Of these, 46 (29%) were recaptured, 35 of them in Newfoundland. Out of 23 1SW salmon tagged and released, eight (35%) were recaptured, five in Newfoundland and three in the Maritimes. Out of 119 2SW salmon tagged and released, 33 (28%) were recaptured, 28 in Newfoundland, three in the Maritimes, and two in Quebec. Some of the tagged salmon were recaptured one and two years after tagging. The other recaptures were in Newfoundland along the northeast coast and south coast (Fig. 12). The mean river ages ranged from 2.4 to 2.9 years.

Site 14. Bay de Verde, 1953

Near Bay de Verde in 1953, 167 salmon were tagged and released (Table 14). Of these, 37 (22%) were recaptured, most of them in Newfoundland (Fig. 13). Out of 14 1SW salmon recaptured, all were caught in Newfoundland. Out of the 19 2SW salmon recaptured, 18 were in Newfoundland and one was in Quebec. Three salmon were caught one and two years after tagging. Most of the salmon recaptured in Newfoundland were caught northwest of the tagging site. The river ages are unavailable.

Site 15. Baccalieu Island, 1973

Near Baccalieu Island in 1973, 15 salmon were tagged and released (Table 15). Of these, three 1SW and one 2SW salmon were recaptured, all of them in Newfoundland (Fig. 14). The mean river ages of the tagged salmon were 3.3 years for 1SW and 3.0 years for MSW salmon.

Site 16. Heart's Content, 1975

Near Heart's Content in 1975, 65 salmon were tagged and released (Table 16). Of these, eight (12%) were recaptured, seven in Newfoundland and one in the Maritimes. All of the recaptures in Newfoundland were to the northwest of the tagging site (Fig. 15). The mean river ages ranged from 2.7 years for 2SW to 3.4 years for 1SW salmon.

Site 17. Bonavista, 1940

Near Bonavista in 1940, 454 salmon were tagged and released (Table 17). Of these, 180 (40%) were recaptured, 157 (87%) of them in Newfoundland. Some of the recaptures occurred one and two years after tagging. In Newfoundland, the recaptures occurred to the south and northwest of the tagging site (Fig. 16). Out of 386 1SW salmon tagged, 151 (39%) were recaptured and of these, 140 (93%) occurred in Newfoundland and Labrador. Out of 50 2SW salmon tagged, 22 (44%) were recaptured and of these, 14 (64%) occurred in Newfoundland and Labrador, 7 (32%) in the Maritimes, and one (5%) in Quebec. The river ages of the tagged and recaptured salmon are unavailable.

Site 18. Cape Bonavista, 1973

Off Cape Bonavista in 1973, 25 salmon were tagged and released (Table 18). Of these, five (20%) were recaptured and all of these were 1SW salmon. All of the tagged salmon recaptured were caught in Newfoundland (Fig. 17). The mean river age of the tagged salmon was 3.1 years for 1SW and 2.4 years for 2SW salmon.

Site 19. Flat Island, 1952

Near Flat Island in 1952, 286 salmon were tagged and released (Table 19). Of these, 54 (19%) were recaptured, most of them in Newfoundland (Fig. 18). Out of 256 1SW salmon tagged, 46 (18%) were recaptured, 45 (98%) in Newfoundland. Five recaptures occurred from one to three years after tagging. The river ages of the tagged and recaptured salmon are unavailable.

NORTHEAST COAST

Site 20. Cape Freels, 1973

Near Cape Freels in 1973, 36 salmon were tagged and released (Table 20). Of these, nine (25%) were recaptured. All of the recaptured salmon were caught in Newfoundland and Labrador (Fig. 19). The mean river age of the 1SW salmon was 2.8 years and the 2SW was 3.0 years.

Site 21. Fogo Island, 1973

Near Fogo Island in 1973, 25 salmon were tagged and released (Table 21). Of these, nine (36%) were recaptured. Out of the nine tagged salmon recaptured, eight were in Newfoundland and one in the Maritimes. Two salmon were caught the year after they were tagged. Salmon were recaptured to the north and south of the tagging site (Fig. 20). The 2SW salmon had a mean river age of 3.0 years while that of 1SW salmon was 3.2 years.

Site 22. Change Islands, 1951

Near Change Islands in 1951, 156 salmon were tagged and released (Table 22). Of these, 39 (25%) were recaptured, four of them at a counting fence on the Gander River, Newfoundland. Out of 141 1SW salmon tagged, 31 (22%) were recaptured, all of them in Newfoundland. Two of these salmon were caught the year after tagging. Recaptures occurred along the northeast coast to the northwest and southeast of the tagging site (Fig. 21). The river ages of these salmon are unavailable.

Site 23. Twillingate, 1952

Near Twillingate in 1952, 36 salmon were tagged and released (Table 23). Of these, four (11%) were recaptured, one in Newfoundland, two in the Maritimes, and one in Quebec (Fig. 22). There were no tagged salmon recaptured in the immediate vicinity of the tagging site. The mean river ages varied from 2.4 years for 1SW salmon to 2.8 years for previous spawners.

Site 24. Twillingate, 1975

Near Twillingate in 1975, one 2SW salmon was tagged and released (Table 24). It was not recaptured. It had a river age of three years.

Site 25. Cape St. John, 1973

Near Cape St. John in 1973, 115 salmon were tagged and released (Table 25). Of these, 30 (26%) were recaptured, 28 (93%) in Newfoundland and Labrador, one (3%) in the Maritimes, and one (3%) in Quebec. One each of the 1SW and MSW salmon were recaptured the year after they were tagged. The recaptures of 1SW salmon occurred to the north and south of the tagging site

(Fig. 23). Mean river ages ranged from 3.1 years for 1SW salmon to 4.0 years for previous spawners.

Site 26. Cape Fox, 1973

Near Cape Fox in 1973, 35 salmon were tagged and released (Table 26). Of these, nine (26%) were recaptured, all of them in Newfoundland. There were recaptures to the north and south of the tagging site and on the west coast of Newfoundland (Fig. 24). Mean river ages ranged from 3.2 years for 1SW salmon to 3.4 years for 2SW salmon.

Site 27. Hare Bay, 1973

In Hare Bay in 1973, 69 salmon were tagged and released (Table 27). Of these, 16 (23%) have been recaptured, and of these 14 (88%) were in Newfoundland and two (12%) were in the Maritimes. The recaptures of 1SW and 2SW salmon occurred to the north and south of the tagging site (Fig. 25). There were two 1SW salmon recaptured on the west coast of Newfoundland. There was one recapture two years after tagging. Mean river age was 3.3 years for all sea ages.

LABRADOR

Site 28. Henley Harbour, 1973

Near Henley Harbour in 1973, 23 salmon were tagged and released (Table 28). Of these, six (26%) were recaptured, all of them in Labrador. Most of the recaptures were to the north of the tagging site (Fig. 26). Mean river ages ranged from 3.8 years for 2SW and previously spawned salmon to 5.0 years for 1SW salmon.

Site 29. Cape Charles, 1948

Near Cape Charles in 1948, 59 salmon were tagged and released (Table 29). Of these, eight (14%) were recaptured, all of them in Newfoundland and Labrador. These recaptures occurred to the north and in rivers south of the tagging site and along the west coast of Newfoundland (Fig. 27). River ages of these salmon are not available.

Site 30. Francis Harbour Bight, 1950

Near Francis Harbour Bight in 1950, 115 salmon were tagged and released (Table 30). Of these, 14 (12%) were recaptured, all of them in Newfoundland and Labrador. These recaptures occurred to the north and south of the tagging site and along the west coast of Newfoundland (Fig. 28). River ages of these salmon are unavailable.

Site 31. Snug Harbour, 1971

Near Snug Harbour in 1971, four 1SW salmon were tagged and released (Table 31). Of these, one (25%) was recaptured in Labrador to the south of the tagging site (Fig. 29). Mean river age of the tagged salmon was 3.3 years.

Site 32. Square Islands, 1973

At Square Islands in 1973, 51 salmon were tagged and released (Table 32). Of these, nine (18%) were recaptured in Newfoundland and Labrador. These recaptures occurred to the north and south of the tagging site as well as on the west and northeast coasts of Newfoundland (Fig. 30). Mean river ages of the tagged salmon ranged from 3.6 years for 1SW salmon to 4.2 years for 2SW salmon.

Site 33. Spotted Islands, 1973

Near Spotted Islands in 1973, 25 salmon were tagged and released (Table 33). Of these, seven (28%) were recaptured. All of the recaptures were in Labrador; 4 in freshwater and 3 in the sea. The recaptures occurred to the north and south of the tagging site (Fig. 31). Mean river ages of the tagged salmon ranged from 3.5 years for previous spawners to 4.5 years for 1SW salmon.

Site 34. Black Island, 1971

Near Black Island in 1971, 44 salmon were tagged and released (Table 34). Of these, 13 (30%) were recaptured. Two recaptures occurred the year after the salmon were tagged. Most of the recaptures were in rivers near the site where the fish were tagged. Two recaptures occurred south of the tagging site, one of these was in Newfoundland and the other was in Quebec (Fig. 32). Mean river ages ranged from 3.5 years for 2SW salmon to 4.3 years for 1SW salmon.

Site 35. Gready, 1971

Near Gready in 1971, four salmon were tagged and released (Table 35). Of these, one (25%) was recaptured near the tagging site in Labrador (Fig. 33). Mean river age of the tagged salmon was 4.3 years.

Site 36. Gready Island, 1973

Near Gready Island in 1973, 28 salmon were tagged and released (Table 36). Of these, 11 (39%) were recaptured, all of them in Labrador (Fig. 34). All recaptures were in the vicinity of the tagging site. Mean river ages of the

tagged salmon ranged from 4.3 years for 1SW salmon and previous spawners to 4.4 years for 2SW salmon.

Site 37. Pack's Harbour, 1971

Near Pack's Harbour in 1971, 78 salmon were tagged and released (Table 37). Of these, 24 (31%) were recaptured, most of them in rivers near the tagging site (Fig. 35). There were three 1SW salmon recaptured one or more years after they were tagged. One salmon was recaptured north of the tagging site and three to the south. One of the southward bound salmon was recaptured on the west coast of Newfoundland. Mean river ages of the tagged salmon ranged from 4.1 years for 2SW salmon to 4.6 years for 1SW salmon.

Site 38. Cape Porcupine, 1971

Near Cape Porcupine in 1971, 10 salmon were tagged and released (Table 38). Of these, four (40%) were recaptured, all of them in Labrador (Fig. 36). There was one tagged salmon recaptured two years after it was tagged. Mean river age of the tagged salmon was 3.8 years.

Site 39. Groswater Bay, 1974

In Groswater Bay in 1974, 13 salmon were tagged and released (Table 39). Of these, six (46%) were recaptured in Labrador. There were three salmon recaptured in Lake Melville, one north of the tagging site and two in the vicinity of the tagging site (Fig. 37). Mean river age of the tagged salmon was 3.9 years.

Site 40. Cape Makkovik, 1974

Near Cape Makkovik in 1974, six salmon were tagged and released (Table 40). Of these, three (50%) were recaptured, all of them in Labrador. One was recaptured at the tagging site, another to the south, and the third in Lake Melville (Fig. 38). Mean river age of the tagged salmon was 4.0 years.

LABRADOR SEA AND GRAND BANK OF NEWFOUNDLAND

Site 41. Virgin Rocks, 1973

Near the Virgin Rocks on the Grand Bank of Newfoundland in 1973, three 1SW salmon were tagged and released (Table 41). Of these, two (67%) were recaptured, one of them in the year that it was tagged and the other in the following year. One of the recaptures occurred in Fortune Bay and the other in Trinity Bay (Fig. 39). Mean river age of the tagged salmon was 3.0 years.

Sites 42-52. Labrador Sea, 1970-77

At various sites in the Labrador Sea from 1970 to 1977, 109 salmon were tagged and released (Tables 42-52). Of these, 15 (14%) were recaptured, seven in Newfoundland, three in the Maritimes, two in Quebec, one in Greenland, one in Ireland, and one in Scotland (Fig. 40). Mean river age of these salmon ranged from 2.0 years for 1SW salmon and 3.5 years for 2SW salmon.

MIGRATION PATTERNS

West Coast (Site 1)

There was not enough information for an indepth summary. The single salmon tagged and released moved further inside the bay from the tagging site prior to it's subsequent recapture in a commercial fishing net.

South Coast (Sites 2-10)

In the Port-aux-Basques area on Newfoundland's south coast, salmon of all sea-ages have been tagged and released. These salmon migrated from the tagging area to southwest Newfoundland, and the Gulf of St. Lavrence areas of Quebec, New Brunswick and Nova Scotia. Only a few salmon were caught on the south coast of Newfoundland to the east of the tagging area. Recaptures were concentrated in Miramichi and Gaspé areas.

Towards the eastern side of the south coast, i.e. Placentia Bay, the proportion of salmon moving easterly increases over that to the west. Also in this area salmon were present that moved to the northeast and east coast of Newfoundland. Within bays, i.e. Fortune Bay, a higher proportion of salmon were migrating into rivers or were caught in the vicinity of the tagging site rather than making long-distant movements to rivers in Mainland areas of Canada.

East Coast (Sites 11-19)

Salmon of all sea-ages that were tagged and released at sites along the east coast of Newfoundland were migrating both northward and southward to other areas of Newfoundland, as well as to Quebec, Nova Scotia and New Brunswick. The further north the tagging site, the higher was the proportion of northward migrating salmon. The recaptures of salmon the year after tagging suggested the presence of non-maturing salmon. Also present at southeast coast tagging sites were salmon that subsequently migrated to rivers of the Atlantic Coast of Nova Scotia and into the Bay of Fundy. This contrasts with the south coast tagging sites where there were no salmon recaptured on the Atlantic Coast of Nova Scotia or in the Bay of Fundy.

Northeast Coast (Sites 20-27)

The migration patterns of salmon that were tagged and released in areas along the northeast coast of Newfoundland were similar to those along the east coast. Notable exceptions were those salmon tagged and released in Hare Bay where there were tagged salmon that were migrating to the northern portion of the northwest coast. Also present at northeast coast tagging sites in contrast to the southeast coast sites were 1SW and MSW salmon that subsequently migrated to the coast of Labrador. Proportionately, more of the 1SW salmon tagged at northeast coast sites were recaptured in the area of tagging and in Newfoundland rivers. This may imply that a higher proportion of these salmon are of local origin than in other areas. There is also a trend to higher river ages with distance northwards along the northeast coast.

Labrador (Sites 28-40)

The migration patterns of salmon that were tagged and released along the Labrador coast show salmon of all sea ages moving northward and southward from the tagging sites to rivers in Newfoundland and Labrador. Some salmon also migrated to insular Newfoundland. In the vicinity of Sandwich Bay there is a much higher proportion of salmon recaptured in nearby rivers than from southern Labrador. There was a single salmon that subsequently migrated to Quebec. There were no salmon recaptured in New Brunswick and Nova Scotia from those salmon tagged at sites in Labrador. Smolt tagging experiments have shown that salmon from New Brunswick and Nova Scotia do migrate along the Labrador coast; although the proportion is lower than in insular Newfoundland (Pippy 1982).

Labrador Sea and Grand Bank of Newfoundland (Sites 41-52)

The recapture sites of salmon that were tagged and released at the Virgin Rocks suggested movements inshore to Newfoundland and then southward and northward around the coast (Fig. 39).

The recapture sites of salmon that were tagged and released in the Labrador Sea were inshore to Newfoundland, as well as Scotland, Ireland, Greenland, Quebec and New Brunswick (Fig. 40).

SUMMARY

From 1940 to 1976, a total of 1968 1SW, 1206 2SW, 76 3SW, two 4SW, and 131 previously spawned salmon were tagged and released into the marine coastal waters of Newfoundland and Labrador (Table 53 and 54). Out of 3383 releases, 875 (26%) salmon were recaptured. Of these recaptures 578 salmon (66%) were caught in Newfoundland, 105 (12%) were caught in Labrador, 125 (14%) were caught in the Maritimes, 66 (8%) were caught in Quebec, and one at West Greenland. There were no tagged salmon recaptured in Maine, USA.

Of the 449 recaptures of 1SW salmon tagged and released in Newfoundland coastal waters, 416 (93%) were recaptured in Newfoundland and Labrador, in both freshwater and marine environments. Of the 292 recaptures of MSW salmon

tagged and released in Newfoundland coastal waters, 148 (51%) were recaptured in Newfoundland and Labrador and 144 (49%) in the Maritimes and Quebec. Of the 53 recaptures of 1SW salmon tagged and released in Labrador coastal waters 52 (98%) were recaptured in Newfoundland and Labrador. Of the 48 recaptures of MSW salmon tagged and released in Labrador coastal waters, all were recaptured in Newfoundland and Labrador. Therefore, it would seem that salmon destined to return to mainland Canadian rivers migrate through Labrador in a lower proportion than those that migrate through coastal waters of Newfoundland.

Out of a total of 875 recaptures of salmon tagged and released in Newfoundland and Labrador, 720 (82%) were caught in marine fisheries and 155 (18%) were in angling fisheries. Of the 1,968 1SW salmon tagged and released, 502 (26%) were recaptured; of these 464 (92%) occurred in the year of tagging, 31 (6%) in the year after tagging, and nine (2%) more than 2 years following tagging. Out of the 1,206 2SW salmon tagged and released, 319 (26%) were recaptured; and of these 303 (95%) were recaptured in the year of tagging, the remaining 16 (5%) were recaptured in the year following tagging. Of the 76 3SW salmon tagged and released, 19 (25%) were recaptured; and of these 15 (79%) were recaptured in the year of tagging and four (21%) were recaptured one year or more following tagging. There were two 4SW salmon tagged and released; both were recaptured in the same year that they were tagged. Out of 131 previously spawned salmon tagged and released, 33 (25%) were recaptured; and of these 29 (88%) were recaptured in the year that they were tagged and four (12%) were recaptured in the year following tagging (Tables 53 and 54).

Of the 502 1SW salmon recaptured from salmon tagged and released into Newfoundland and Labrador waters, 427 (85%) were recaptured in the sea and 75 (15%) were recaptured in freshwater. Of the 373 MSW tagged and recaptured, 293 (79%) were recaptured in the sea and 80 (21%) were recaptured in freshwater.

Of the 109 salmon tagged and released at various locations in the Labrador Sea, 15 (14%) were recaptured (Table 55). Seven (47%) were recaptured in Newfoundland, three (20%) in the Maritimes, two (13%) in Quebec, and one (7%) each in Ireland and Greenland. There were no recaptures in Labrador.

There were three 1SW salmon tagged and released at the Virgin Rocks in 1973; of which two were recaptured in Newfoundland. One was caught in the year it was tagged and another in the following year (Table 53).

COASTAL MOVEMENTS AND MIGRATION PATTERNS

These experiments suggests highly complex migration patterns for the different stocks of salmon in the coastal fishing areas of Newfoundland and Labrador (Fig. 41). This conclusion is similar to that of Belding (1939), Murray (1966 and 1968), and Pippy (1982). From these patterns a number of facts emerge. First, all salmon stocks do not approach the coast at the same location en masse and then move along the coast to their rivers of origin. Instead, it would seem that individual salmon approach the coast at a given location and then move around the coast perhaps passing all or at least some of the other coastal bays. Second, since several recaptures were made the year after tagging, it is possible that some of the 1SW salmon caught would

not have matured until after completion of a second winter at sea. These salmon undoubtedly move away from the coastal areas and back out into feeding areas in the Labrador Sea. Third, the patterns show both clockwise and counter-clockwise movements around the coast. Fourth, salmon found deeper within a bay are more likely to be of local origin than those further out nearer to headlands.

ACKNOWLEDGMENTS

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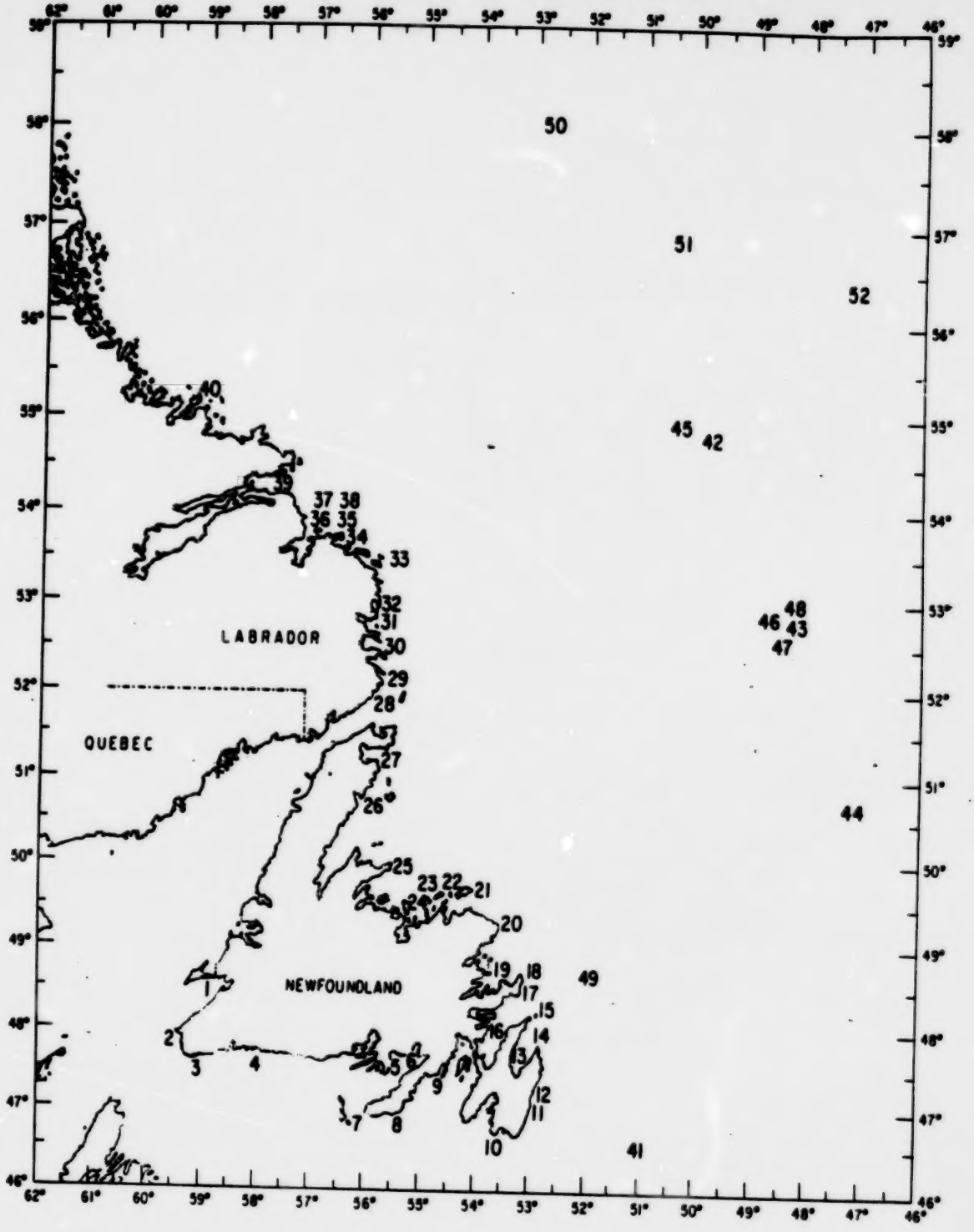

Fig. 1. Sites of tagging experiments in Newfoundland and Labrador.

Table 1. Summary of Atlantic salmon tagging experiment at site 1 in St. George's Bay, Newfoundland in 1976. (S=sea recaptures, R=river recaptures)

1. Tagging area: St. George's Bay (48°29'50"N, 58°56'45"W)

2. Date: May 25, 1976

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle approximately 8 mm apart was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon driftnets.

Release data			Year of recapture	Number recaptured										
Sea age	Date tagged	No. tagged		Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1														
2	May 25	1	1976	1	-	-	-	-	-	-	-	1	-	1
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1												
2	-	-	1	-	-	-	-	-	-	-	3.000	0.000
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1																					
2	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3																					
PS																					

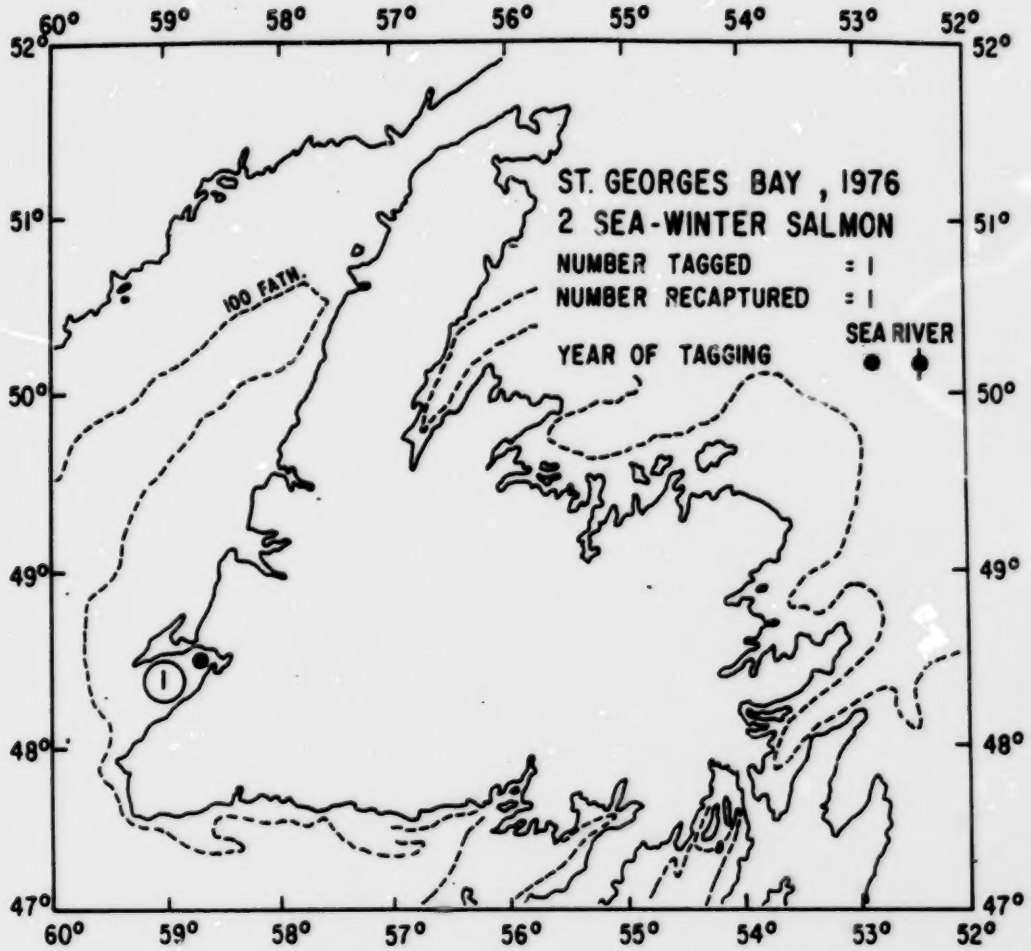

Fig. 2. The tag release and recapture locations for Atlantic salmon tagged at site 1 in St. George's Bay, Newfoundland in 1976.

Table 2. Summary of Atlantic salmon tagging experiment at site 2 near Port-aux-Basques, Newfoundland in 1969. (S=sea recaptures, R=river recaptures)

1. Tagging area: Port aux Basques

2. Date: May 2 - June 10, 1969

3. Type of tag: Carlin, yellow plastic I-series, tapered tag, 42 mm x 3.5 - 5.2 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.

5. Type of gear: Salmon Driftnets and Baltic Longline.

Release data			Year of recapture	Number recaptured														Grand total
Sea age	Date tagged	No. tagged		Nfld. S	Nfld. R	Lab. S	Lab. R	West Greenland S	West Greenland R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R			
1	June 5-10	6	1969	-	2	-	-	-	-	1	-	-	-	1	2			3
2	May 8- June 10	187	1969	14	6	-	-	-	-	33	5	10	10	57	21			78
			1970	2	-	-	-	1	-	-	1	-	1	3	2			5
3	May 6- June 10	31	1969	-	-	-	-	-	-	4	-	2	2	6	2			8
			1970	-	-	1	-	-	-	-	-	1	-	2	-			2
PS	May 2- June 9	26	1969	-	-	-	-	-	-	5	-	1	-	6	-			6
			1970	2	-	-	-	-	-	-	1	1	-	3	1			4

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	-	5	1	-	-	-	-	-	-	3.167	0.408
2	-	21	104	48	10	1	-	-	-	3	3.272	0.755
3	-	4	18	5	-	-	-	-	-	4	3.037	0.587
PS	-	4	18	4	-	-	-	-	-	-	3.000	0.566

Sea age	River ages of salmon recaptured in																							
	Newfoundland						Labrador					West Greenland							Maritimes and Quebec					
	2	3	4	5	?	Av.	2	3	4	5	Av.	1	2	3	4	5	6	AV.	2	3	4	5	6	?	AV.
1	-	2	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	3.000
2	4	12	5	-	1	3.048	-	-	-	-	-	-	-	1	-	-	-	3.000	6	33	18	2	1	-	3.317
3	-	-	-	-	-	-	1	-	-	-	2.000	-	-	-	-	-	-	-	1	4	3	-	-	1	3.250
PS	-	2	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	6	2	-	-	-	3.250

PS = previous spawners
S = sea
R = river

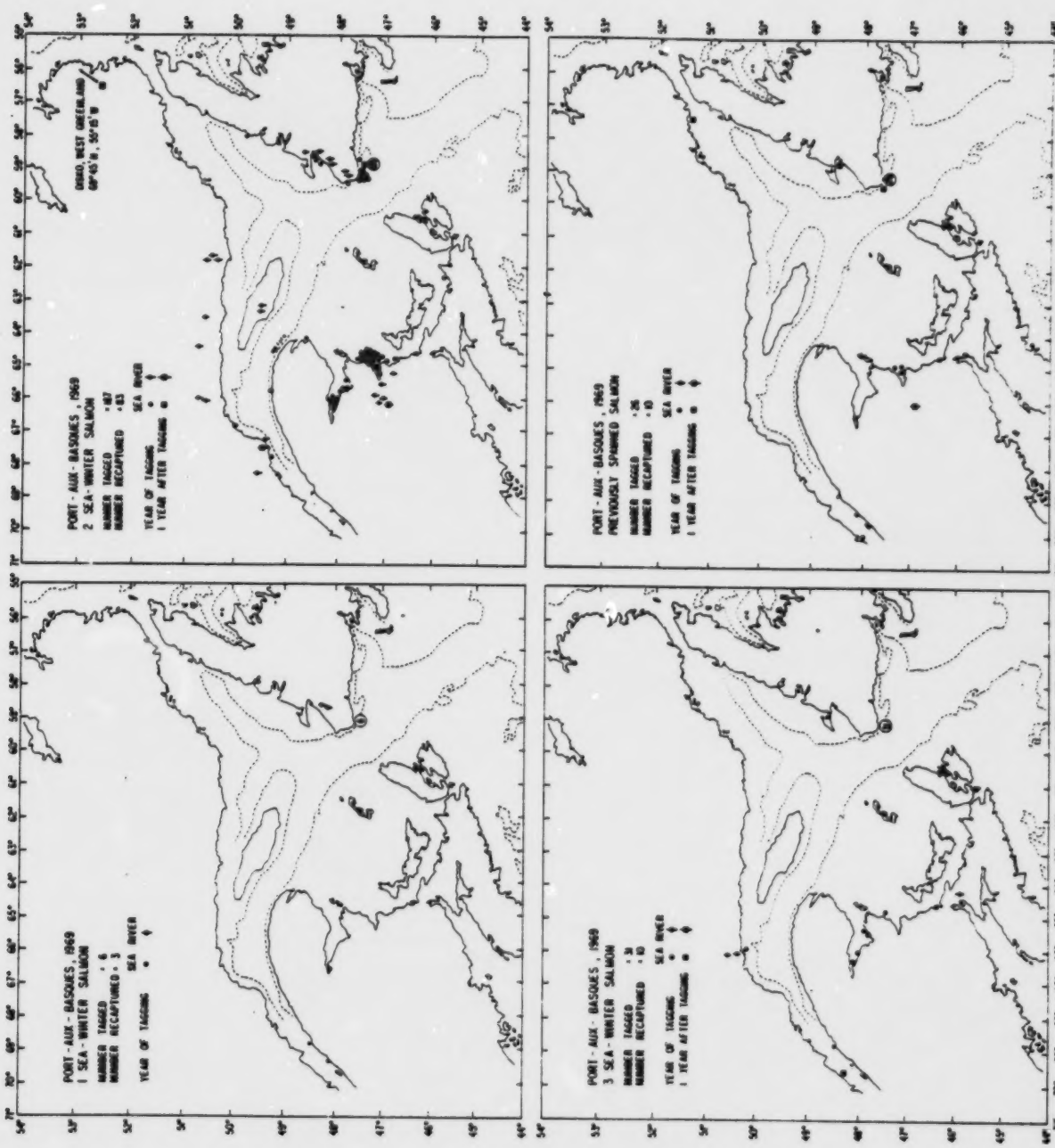
PORT - AUX - BASQUES , 1969
1 SEA - WINTER SALMON
NUMBER TAGGED : 6
NUMBER RECAPTURED : 3
YEAR OF TAGGING SEA RIVER
1 YEAR AFTER TAGGING
PORT - AUX - BASQUES , 1969
2 SEA - WINTER SALMON
NUMBER TAGGED :87
NUMBER RECAPTURED :13
YEAR OF TAGGING SEA RIVER
1 YEAR AFTER TAGGING
PORT - AUX - BASQUES , 1969
3 SEA - WINTER SALMON
NUMBER TAGGED : 3
NUMBER RECAPTURED : 0
YEAR OF TAGGING SEA RIVER
1 YEAR AFTER TAGGING
PORT - AUX - BASQUES , 1969
PREVIOUSLY SPAWNED SALMON
NUMBER TAGGED :26
NUMBER RECAPTURED : 0
YEAR OF TAGGING SEA RIVER
1 YEAR AFTER TAGGING

Fig. 3. The tag release and recapture locations for Atlantic salmon tagged at site 2 near Port-aux-Basques, Newfoundland in 1969.

Table 3. Summary of Atlantic salmon tagging experiment at site 3 near Port-aux-Basques, Newfoundland in 1976. (S=sea recaptures, R=river recaptures)

1. Tagging area: Port aux Basques

2. Date: May 29 - June 10, 1976

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle approximately 8 mm apart was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon driftnets.

Release data			Year of recapture	Number recaptured										
				Nfld.		Labrador		Maritimes		Quebec		Total		
Sea age	Date tagged	No. tagged		S	R	S	R	S	R	S	R	S	R	Grand total
1	May 29 - June 9	24	1976	1	2	-	-	-	1	-	-	1	3	4
2	May 29 - June 10	178	1976	1	1	-	-	5	4	6	8	12	13	25
			1977	-	-	-	-	-	2	1	-	1	2	3
3	June 7	1												
PS	May 29 - June 10	11	1976	-	-	-	-	1	-	1	1	2	1	3

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	3	12	8	1	-	-	-	-	-	3.292	.751
2	-	25	105	36	4	-	-	-	-	7	3.112	.666
3	-	-	1	-	-	-	-	-	-	-	3.000	.000
PS	-	2	9	-	-	-	-	-	-	-	2.818	.404

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	?	Av.
1	-	-	2	1	-	-	3.333	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000
2	-	-	-	2	-	-	4.000	-	-	-	-	-	-	-	-	6	14	4	1	1	3.000
3																					
PS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	3.000

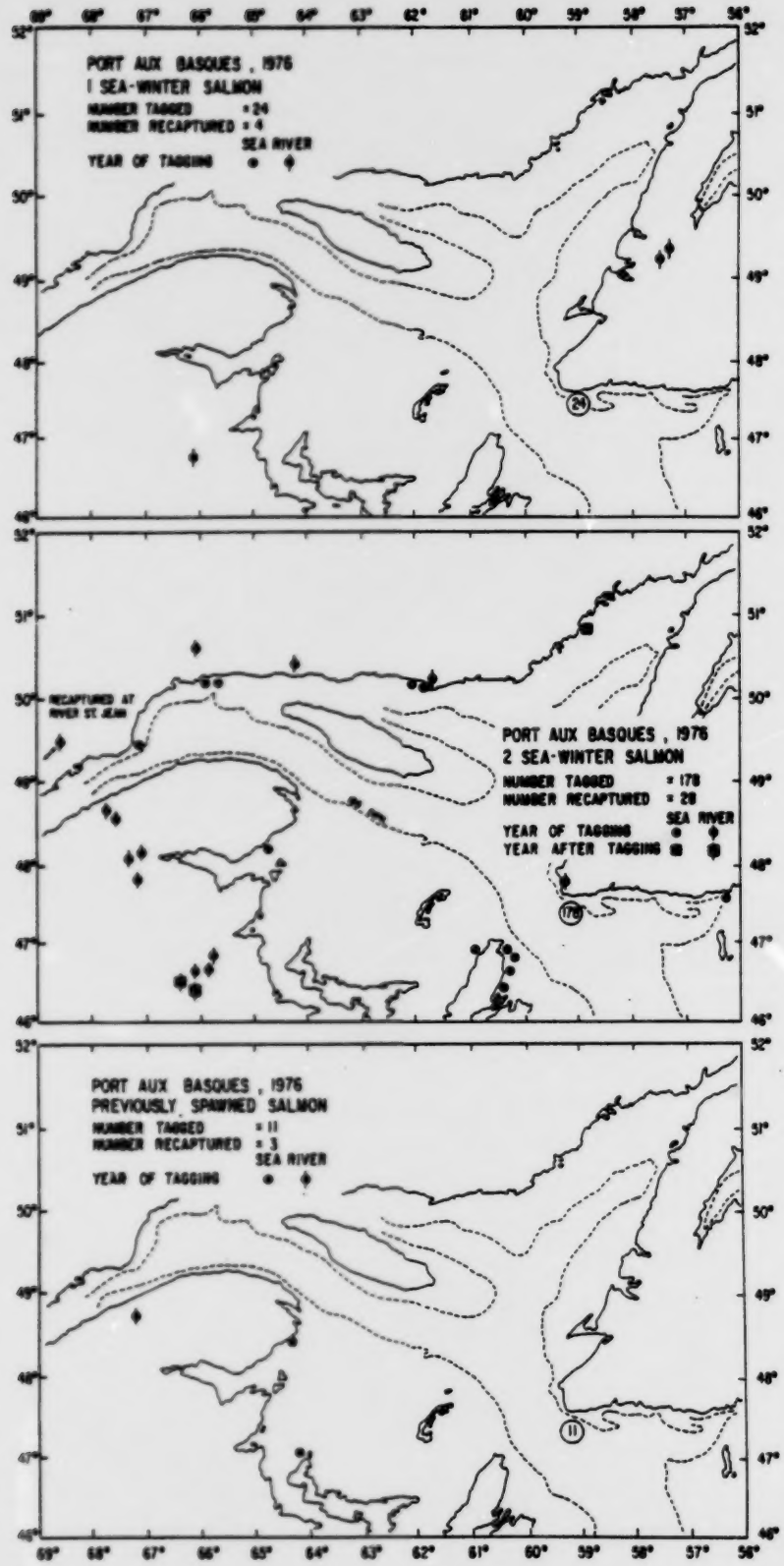

Fig. 4. The tag release and recapture locations for Atlantic salmon tagged at site 3 near Port-aux-Basques, Newfoundland in 1976.

Table 4. Summary of Atlantic salmon tagging experiment at site 4 on Burgeo Bank, Newfoundland in 1977. (S=sea recaptures, R=river recaptures)

1. Tagging area: Burgeo Bank

2. Date: May 7 - May 9, 1977

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle approximately 8 mm apart was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon driftnets.

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1														
2	May 8-9	2		-	-	-	-	-	-	-	-	-	-	-
3	May 7-9	2		-	-	-	-	-	-	-	-	-	-	-
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1												
2	-	2	-	-	-	-	-	-	-	-	2.000	.000
3	-	-	1	1	-	-	-	-	-	-	3.500	.707
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1																					
2																					
3																					
PS																					

Table 5. Summary of Atlantic salmon tagging experiment at site 5 in Fortune Bay, Newfoundland in 1976. (S=sea recaptures, R=river recaptures)

1. Tagging area: Fortune Bay

2. Date: June 21 - July 13, 1976

3. Type of tag: Carlin, yellow plastic Y-series, 15 mm x 5 mm x 0.8 mm and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle approximately 8 mm apart was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon traps and a Multi-purpose trap.

Sea age	Release data: Date tagged	No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 21 - July 13	37	1976	1	-	-	-	-	1	-	-	1	1	2
2														
3														
PS	June 21 - July 13	2	1976	1	-	-	-	-	-	-	-	1	-	1

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	8	17	11	-	-	-	-	-	1	3.0833	.732
2												
3												
PS	-	-	-	1	-	-	-	-	-	1	4.000	0.000

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	1	-	-	-	-	2.000
2																					
3																					
PS	-	-	-	1	-	-	4.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-

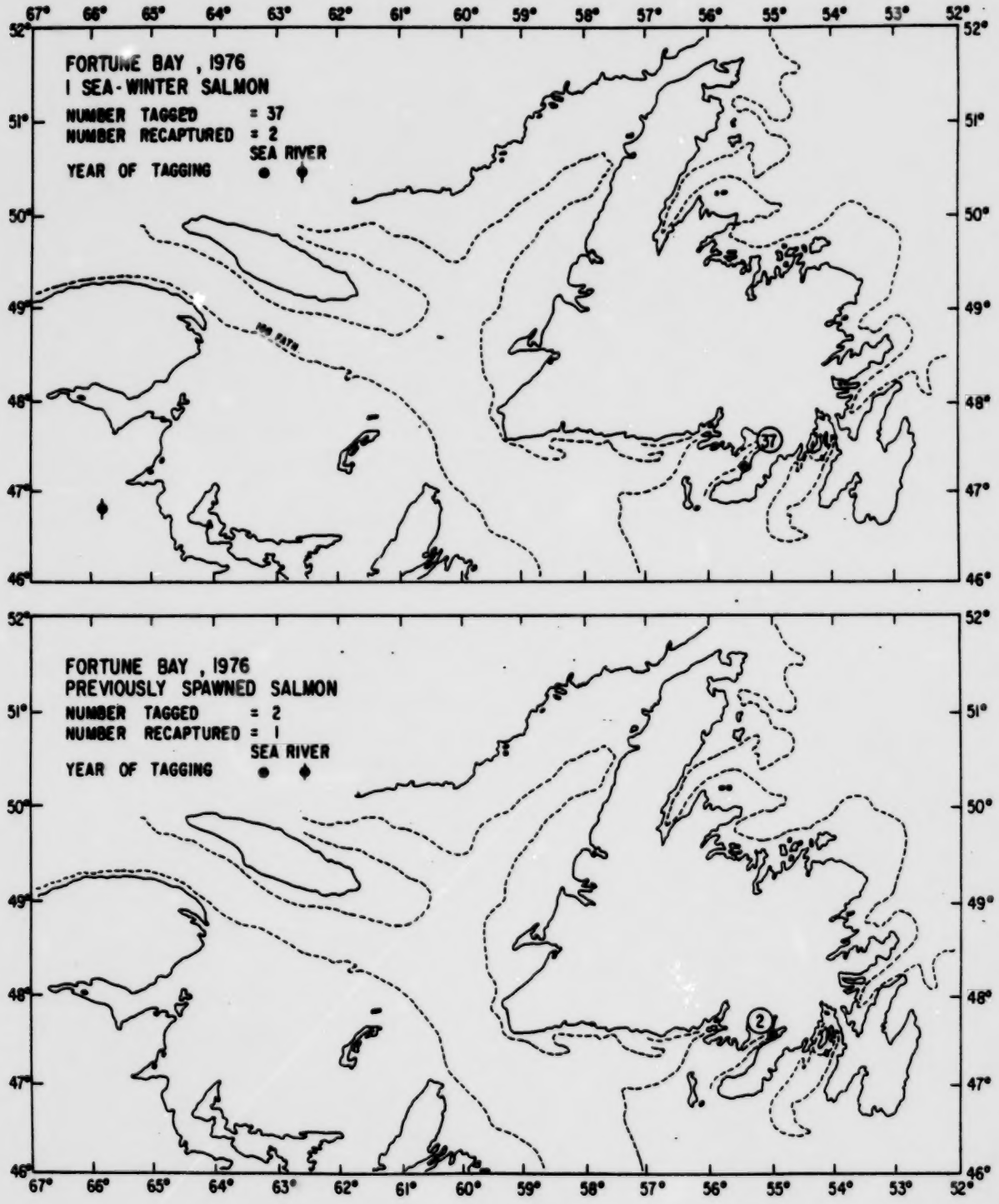

Fig. 5. The tag release and recapture locations for Atlantic salmon tagged at site 5 in Fortune Bay, Newfoundland in 1976.

Table 6. Summary of Atlantic salmon tagging experiment at site 6 in Fortune Bay, Newfoundland in 1977. (S=sea recaptures, R=river recaptures)

1. Tagging area: Fortune Bay

2. Date: June 11 - July 14, 1977

3. Type of tag: Carlin, yellow plastic Y-series, 15 mm x 5 mm x 0.8 mm and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle approximately 8 mm apart was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon trap and salmon set nets.

Release data			Year of recapture	Number recaptured										Grand total
Sea age	Date tagged	No. tagged		Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	
1	June 11 - July 14	37	1977	10	1	-	-	-	-	-	-	10	1	11
2														
0+	July 2	1												
PS	June 13 - July 11	13	1977	1	-	-	-	-	-	-	-	1	-	1

Sea age	River ages of tagged fish										Av.	SD
	1	2	3	4	5	6	7	8	9	10		
1	-	3	25	9	-	-	-	-	-	-	3.162	.553
2												
0+	-	1	-	-	-	-	-	-	-	-	2.000	.000
PS	-	-	9	2	1	-	-	-	-	-	3.333	.651

Sea age	River ages of salmon recaptured in																							
	Newfoundland							Labrador							Maritimes & Quebec									
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.			
1	-	2	6	3	-	-	3.091	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
2																								
0+																								
PS	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

0+ indicates a post smolt with a fork length of 35 cm.

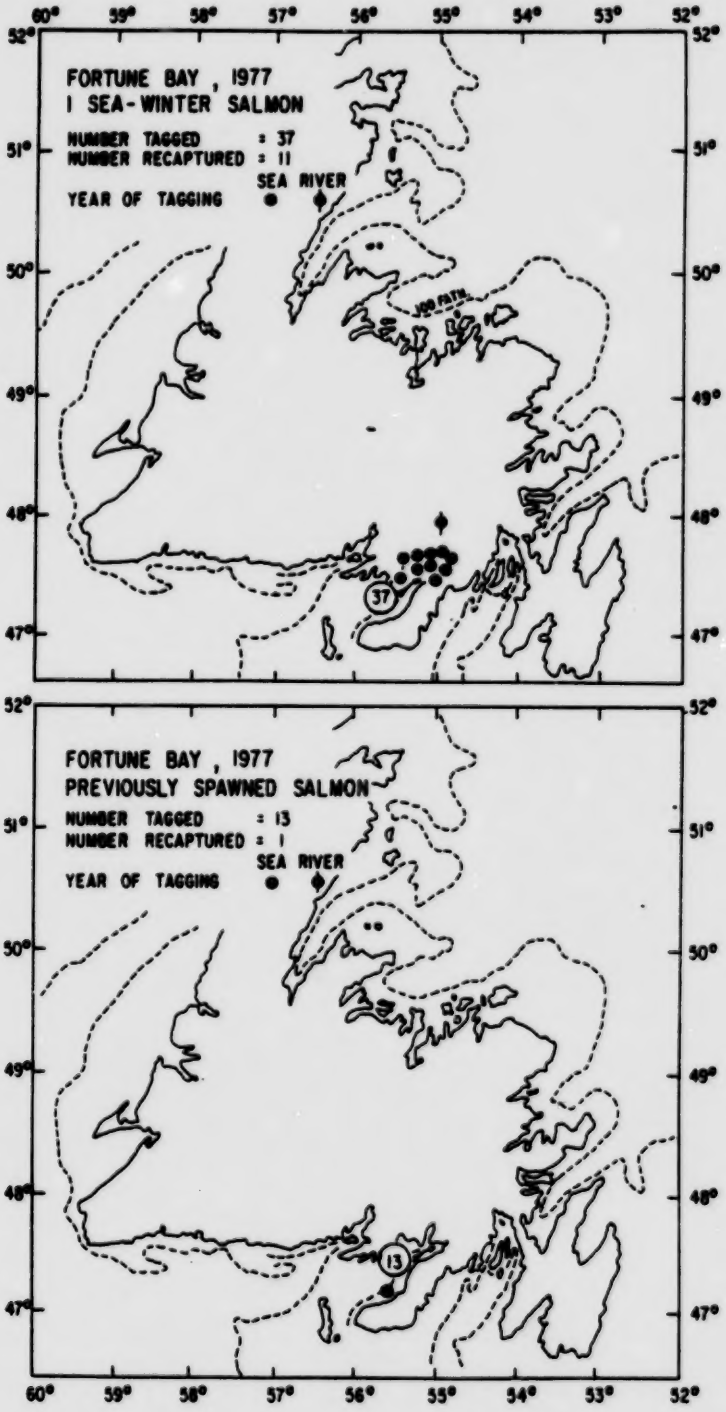

Fig. 6. The tag release and recapture locations for Atlantic salmon tagged at site 6 in Fortune Bay, Newfoundland in 1977.

Table 7. Summary of Atlantic salmon tagging experiment at site 7 near Point Crewe, Newfoundland in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Point Crewe (46°55'23"N; 56°01'45"W)

2. Date: May 26, 1973

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon Driftnets.

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1														
2	May 26	1	1973	1	-	-	-	-	-	-	-	1	-	1
3														
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1												
2	-	1	-	-	-	-	-	-	-	-	2.000	0.000
3												
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1																					
2	-	1	-	-	-	-	2.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

Table 8. Summary of Atlantic salmon tagging experiment at site 8 near St. Lawrence, Newfoundland in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: St. Lawrence, Newfoundland

2. Date: May 15 - 31, 1973

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	May 28-31	6	1973	2	-	-	-	-	2	-	-	2	2	4
2	May 15-31	111	1973	12	-	-	-	-	6	-	6	12	12	24
			1974	-	-	-	-	-	1	-	-	-	1	1
3	May 15-29	9	1973	-	-	-	-	-	-	-	1	-	1	1
PS	May 19-28	3	1973	1	-	-	-	-	1	-	-	1	1	2

Sea age	River ages of tagged fish									Av.	SD
	1	2	3	4	5	6	7	8	9		
1	-	4	2	-	-	-	-	-	-	2.333	0.516
2	-	20	73	14	1	-	-	-	3	2.963	0.595
3	-	4	2	3	-	-	-	-	-	2.889	0.928
PS	-	1	2	-	-	-	-	-	-	2.667	0.577

Sea age	River ages of salmon recaptured in: Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	1	1	-	-	-	2.500	-	-	-	-	-	-	-	-	2	-	-	-	-	2.000
2	-	7	3	1	-	-	3.333	-	-	-	-	-	-	-	-	2	8	3	-	-	3.077
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2.000
PS	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	1	-	-	-	-	2.000

PS = previous spawners
S = sea
R = river

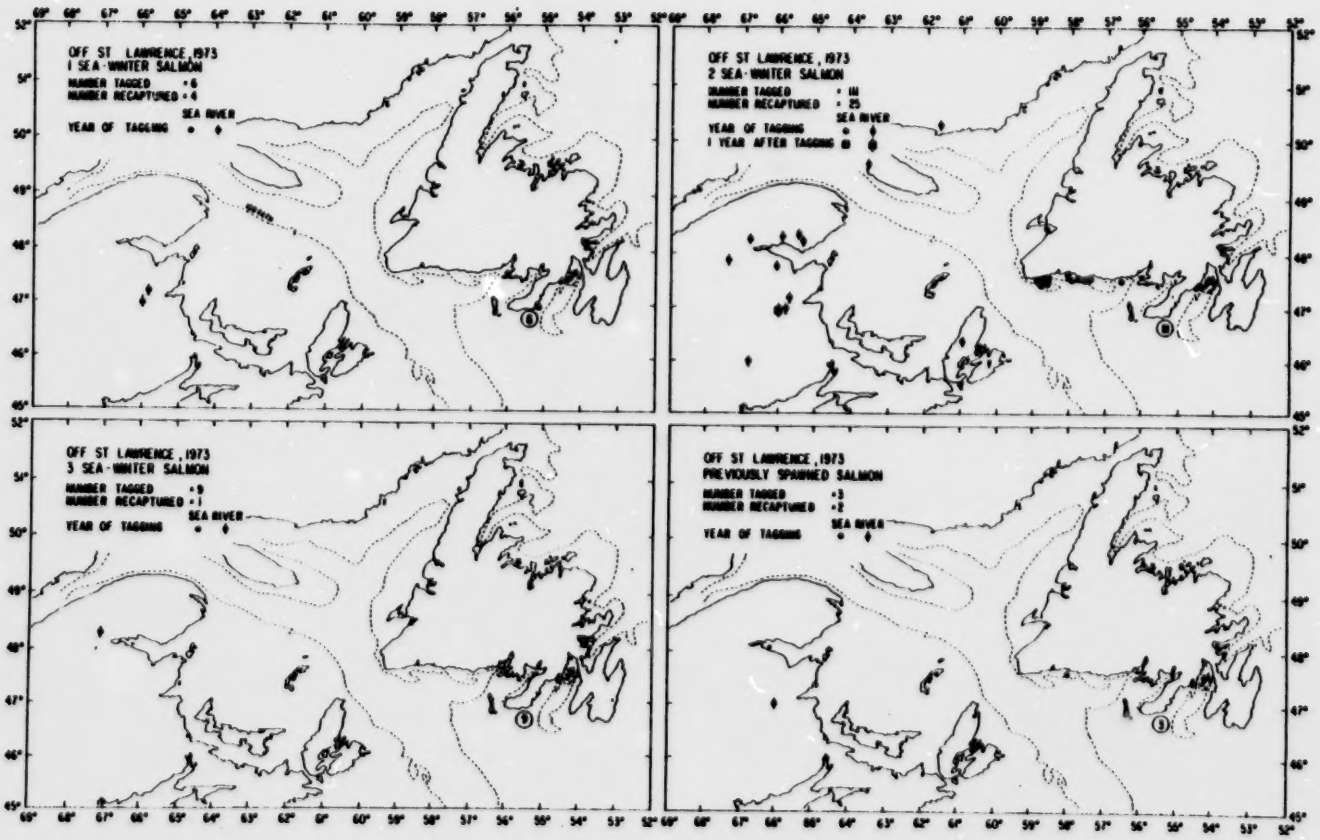

Fig. 7. The tag release and recapture locations for Atlantic salmon tagged at site 8 near St. Lawrence, Newfoundland in 1973.

Table 9. Summary of Atlantic salmon tagging experiment at site 9 in Placentia Bay, Newfoundland in 1975. (S=sea recaptures, R=river recaptures)

1. Tagging area: Placentia Bay

2. Date: May 24 - June 25, 1975

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon Driftnets, Salmon Set Nets and Cod Traps.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 5-25	414	1975	77	8	-	-	-	3	-	-	77	11	88
			1976	3	1	-	-	-	-	-	-	3	1	4
			1977	1								1	-	1
2	May 24-June 25	33	1975	9	-	-	-	-	-	1	-	10	-	10
3														
PS	June 20-24	5												

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	96	248	52	5	-	-	-	-	13	2.915	0.642
2	-	17	12	1	1	-	-	-	-	2	2.548	0.723
3												
PS	-	4	1	-	-	-	-	-	-	-	2.200	0.447

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	?	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	21	52	14	1	2	2.943	-	-	-	-	-	-	-	-	-	2	1	-	-	3.333
2	-	5	4	-	-	-	2.444	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000
3																					
PS																					

PS = previous spawners
S = sea
R = river

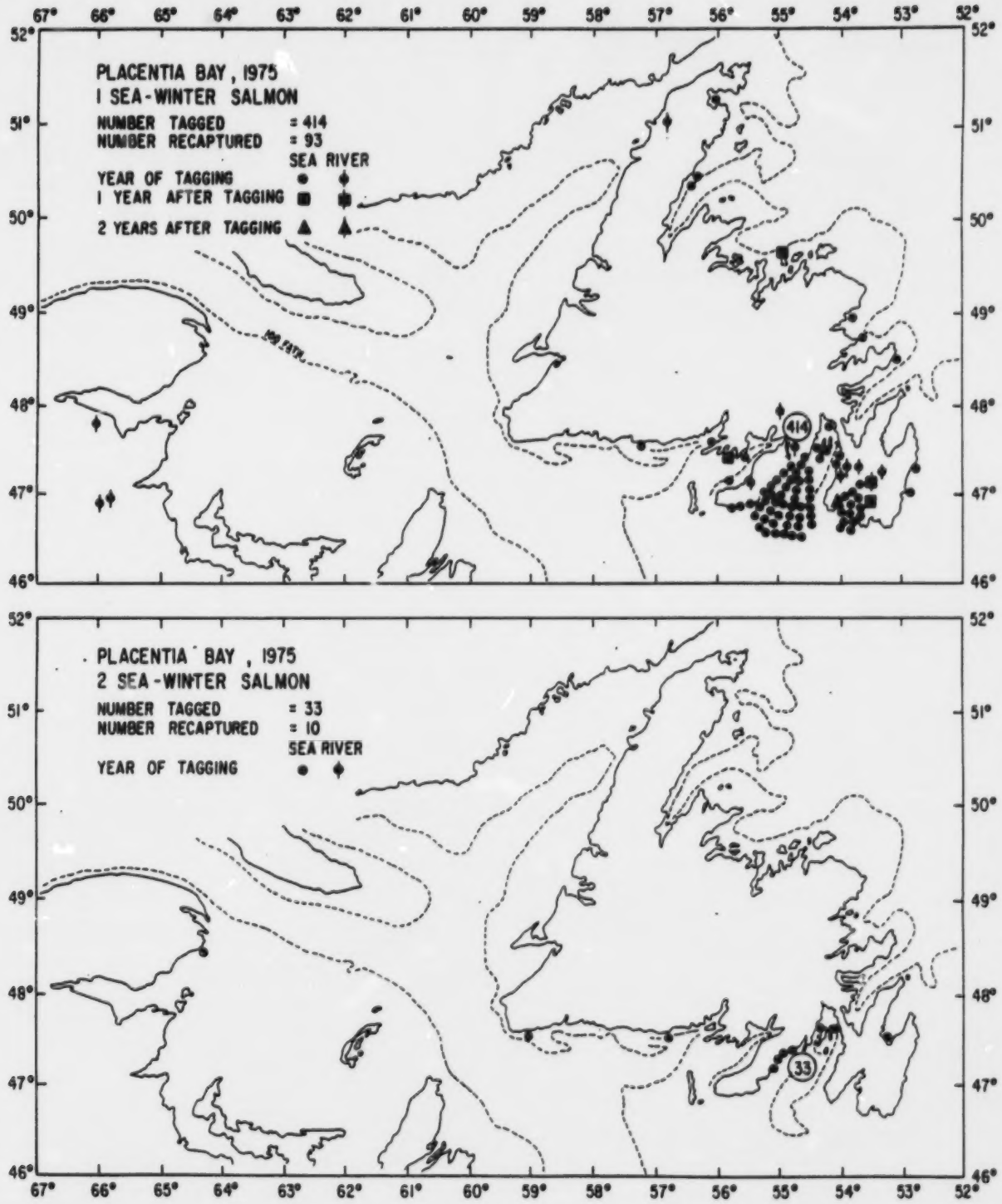

Fig. 8. The tag release and recapture locations for Atlantic salmon tagged at site 9 in Placentia Bay, Newfoundland in 1975.

Table 10. Summary of Atlantic salmon tagging experiment at site 10 near Cape Pine, Newfoundland in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Cape Pine (46°33'38"N; 53°34'00"W)
2. Date: June 2, 1973
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 2	3	1973	1	-	-	-	1	-	-	-	2	-	2
2	June 2	3	1973	1	-	-	-	-	-	-	-	1	-	1
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	1	2	-	-	-	-	-	-	-	2.667	0.577
2	-	3	-	-	-	-	-	-	-	-	2.000	0.000
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	1	-	-	-	-	2.000	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000
2	-	1	-	-	-	-	2.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

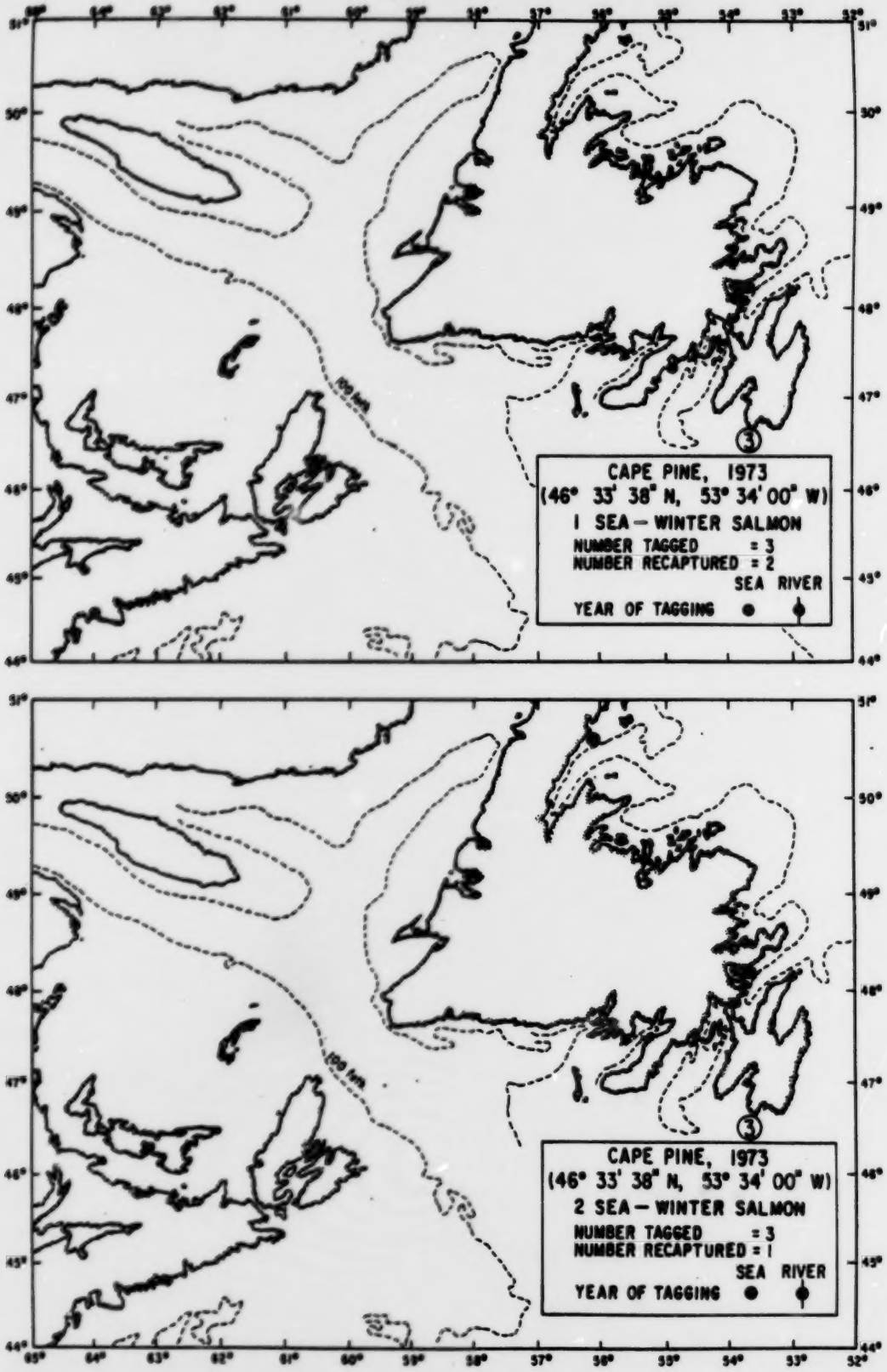

Fig. 9. The tag release and recapture locations for Atlantic salmon tagged at site 10 near Cape Pine, Newfoundland in 1973.

Table 11. Summary of Atlantic salmon tagging experiment at site 11 near Renews, Newfoundland in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Renews
2. Date: June 4 - 7, 1973
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Sea age	Release data: Date tagged	No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 4-7	36	1973	7	1	-	-	-	3	-	-	7	4	11
2	June 4-7	30	1973	1	-	-	-	2	-	2	-	5	-	5
3	June 5	1		-	-	-	-	-	-	-	-	-	-	-
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	7	22	6	1	-	-	-	-	-	3.028	0.696
2	-	5	18	3	-	-	-	-	-	4	2.923	0.560
3	-	-	1	-	-	-	-	-	-	-	3.000	0.000
PS												

Sea age	River ages of salmon recaptured in Newfoundland: 1	2	3	4	5	6	Av.	Labrador: 1	2	3	4	5	6	Av.	Maritimes & Quebec: 1	2	3	4	5	?	Av.
1	-	-	5	3	-	-	3.375	-	-	-	-	-	-	-	-	2	1	-	-	-	2.333
2	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	-	1	1	-	2	3.500
3																					
PS																					

PS = previous spawners
S = sea
R = river

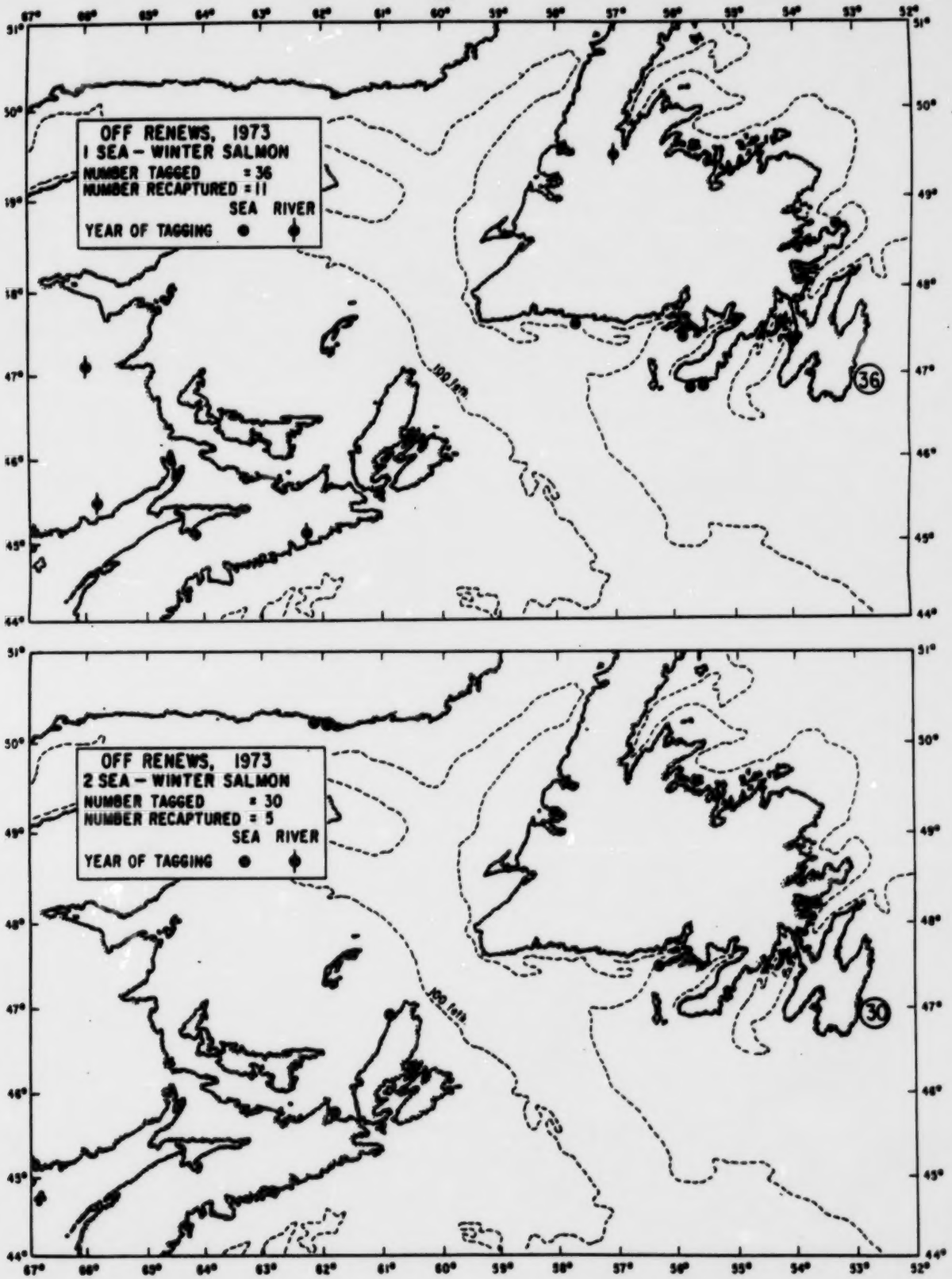

Fig. 10. The tag release and recapture locations for Atlantic salmon tagged at site 11 near Renews, Newfoundland in 1973.

Table 12. Summary of Atlantic salmon tagging experiment at site 12 near Cape Broyle, Newfoundland in 1949. (S=sea recaptures, R=river recaptures)

1. Tagging area: Cape Broyle
2. Date: May 21 - June 13, 1949
3. Type of tag: Light red celluloid, 31 mm x 8 mm x 0.8 mm and wired with nickel 0.8 mm diameter wire.
4. Method of attachment: Single loop of wire through the musculature immediately in front of dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Set Gillnets and Salmon Trap.

Release data			Year of recapture	Number recaptured										
Sea age	Date tagged	No. tagged		Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 2-13	3												
2	May 21-June 13	58	1949	5	1	-	-	1	-	-	-	6	1	7
			1950	-	-	-	-	-	1	-	-	-	1	1
3	May 24-28	2												
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	UNAVAILABLE											
2												
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	UNAVAILABLE																				
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

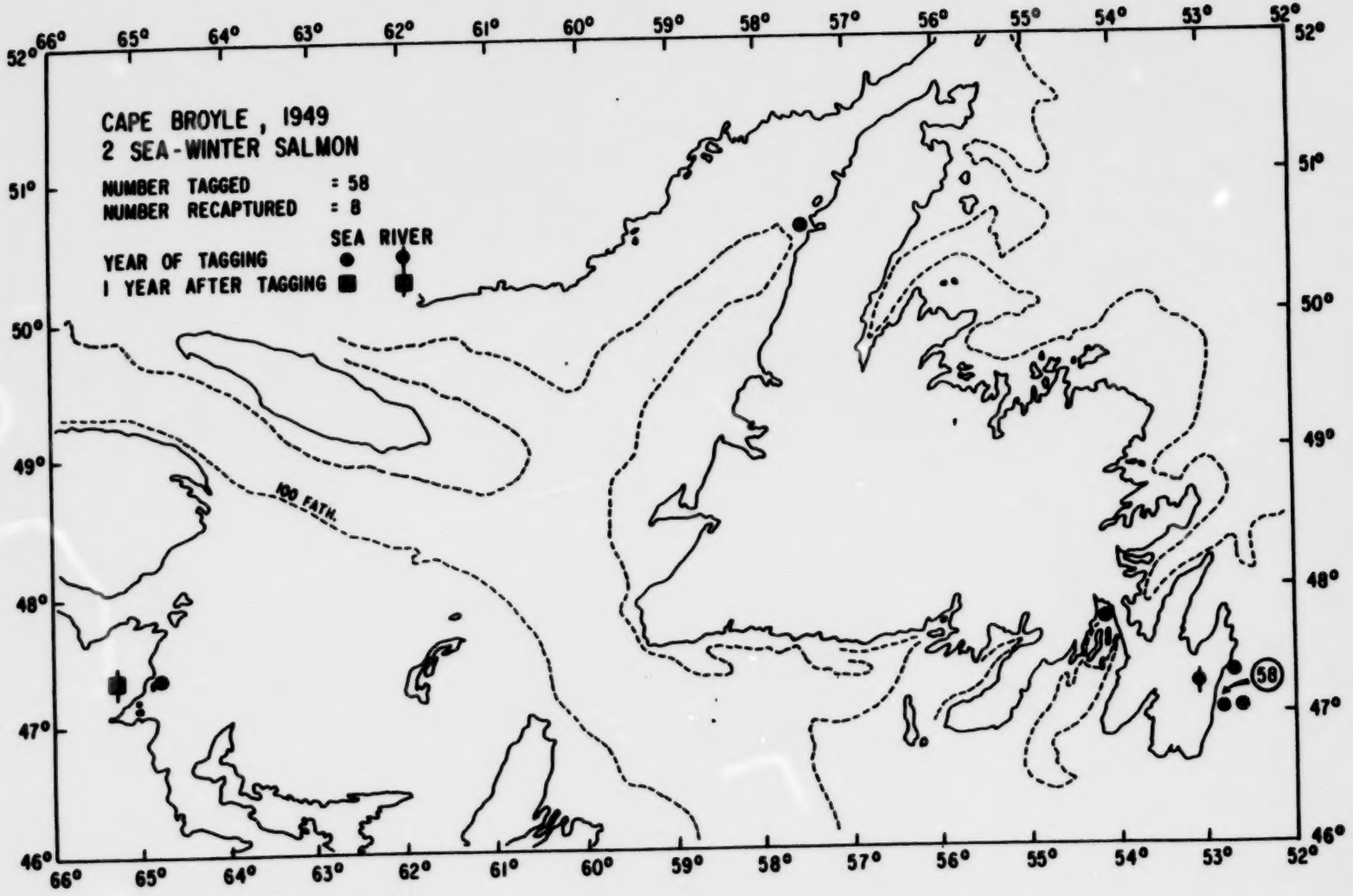
CAPE BROYLE, 1949
2 SEA-WINTER SALMON
NUMBER TAGGED = 58
NUMBER RECAPTURED = 8
SEA RIVER
YEAR OF TAGGING
1 YEAR AFTER TAGGING
100 FATH.
58
66° 65° 64° 63° 62° 61° 60° 59° 58° 57° 56° 55° 54° 53° 52°
52° 51° 50° 49° 48° 47° 46°

Fig. 11. The tag release and recapture locations for Atlantic salmon tagged at site 12 near Cape Broyle, Newfoundland in 1949.

Table 13. Summary of Atlantic salmon tagging experiment at site 13 in Conception Bay, Newfoundland in 1974. (S=sea recaptures, R=river recaptures)

1. Tagging area: Conception Bay

2. Date: May 16 - June 12, 1974

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	May 22 - June 12	23	1974	2	2	-	-	1	2	-	-	3	4	7
			1975											
			1976	1	-	-	-	-	-	-	-	1	-	1
2	May 16 - June 12	119	1974	28	-	-	-	1	1	1	1	30	2	32
			1975	-	-	-	-	-	1	-	-	-	1	1
3	May 31 - June 12	6	1974	1	-	-	-	1	-	-	-	2	-	2
			1975	-	-	-	-	-	-	1	-	1	-	1
PS	May 17 - June 6	12	1974	1	-	-	-	-	1	-	-	1	1	2

Sea age	River ages of tagged fish										Av.	SD
	1	2	3	4	5	6	7	8	9	?		
1	-	7.	14	2	-	-	-	-	-	-	2.783	0.600
2	-	44	48	21	1	1	-	-	-	4	2.843	0.812
3	-	3	2	-	-	-	-	-	-	1	2.400	0.548
PS	-	2	8	1	-	-	-	-	-	1	2.909	0.539

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	2	3	4	5	6	?	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	1	3	1	-	-	-	3.000	-	-	-	-	-	-	-	-	-	3	-	-	-	3.000
2	5	10	11	1	1	-	3.393	-	-	-	-	-	-	-	-	2	3	-	-	-	2.600
3	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	2.500
PS	-	-	1	-	-	-	4.000	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000

PS = previous spawners
S = sea
R = river

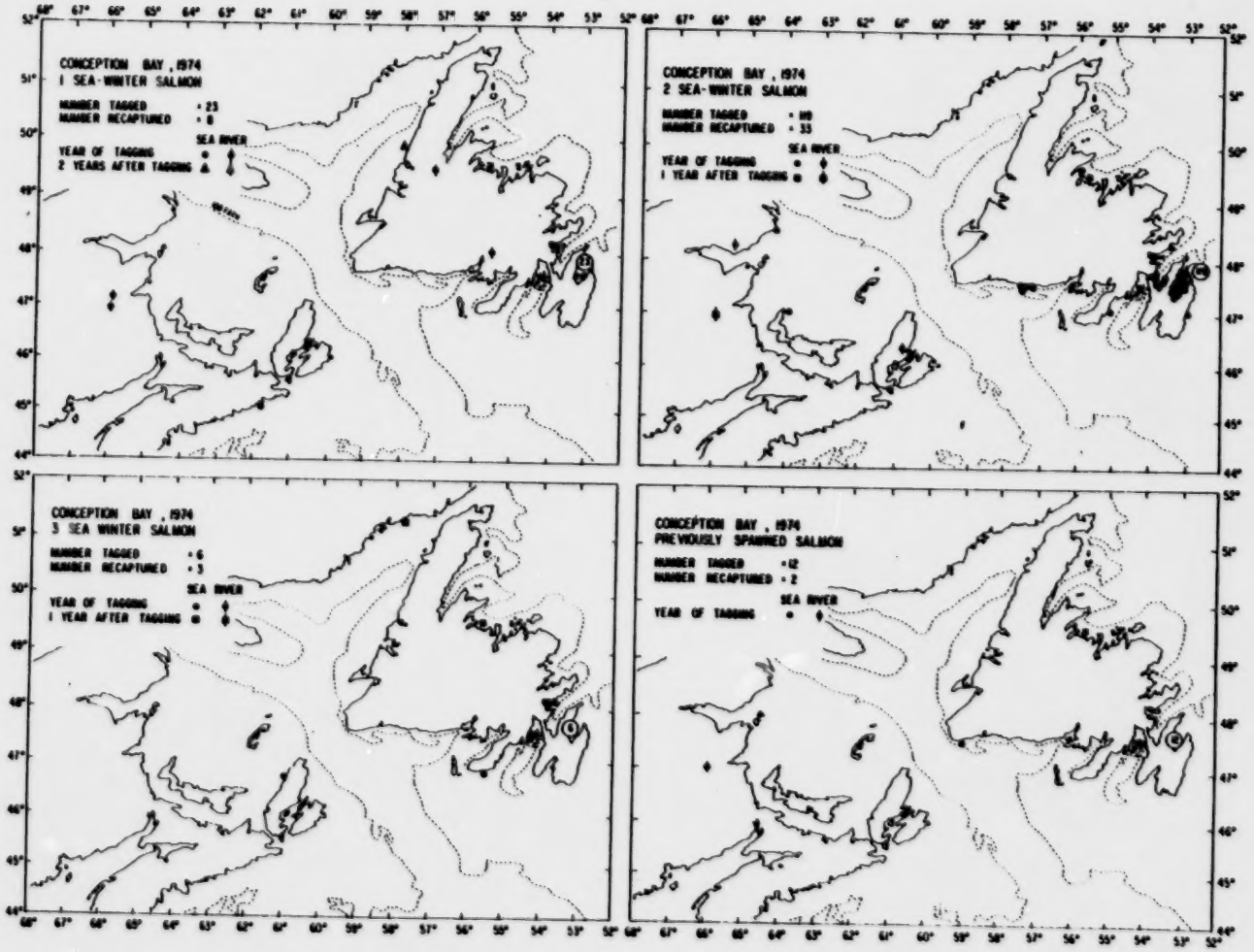

Fig. 12. The tag release and recapture locations for Atlantic salmon tagged at site 13 in Conception Bay, Newfoundland in 1974.

Table 14. Summary of Atlantic salmon tagging experiment at site 14 near Bay de Verde, Newfoundland in 1953. (S=sea recaptures, R=river recaptures)

1. Tagging area: Bay de Verde

2. Date: May 18 - July 11, 1953

3. Type of tag: Dark red vinyl, 31 mm x 8 mm x 0.8 mm and wired with nickel 0.6 mm diameter wire. This was used alternately with 19 gauge nickel pin and vinyl disk 8 mm diameter.

4. Method of attachment: Single loop of wire or straight pin through the musculature immediately in front of dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Set Gillnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	May 30 - July 11	76	1953	12	-	-	-	-	-	-	-	12	-	12
			1954	2	-	-	-	-	-	-	-	2	-	2
2	May 18 - June 25	83	1953	18	-	-	-	-	-	-	1	18	1	19
3	May 23 - June 10	4	1953	1	-	-	-	-	-	-	-	1	-	1
			1955	-	-	-	-	-	-	1	-	1	-	1
PS	May 22 - June 22	4	1953	1	-	-	-	-	-	1	-	2	-	2

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	UNAVAILABLE											
2												
3												
PS												

Sea age	River ages of salmon recaptured in																	
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	UNAVAILABLE																				
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

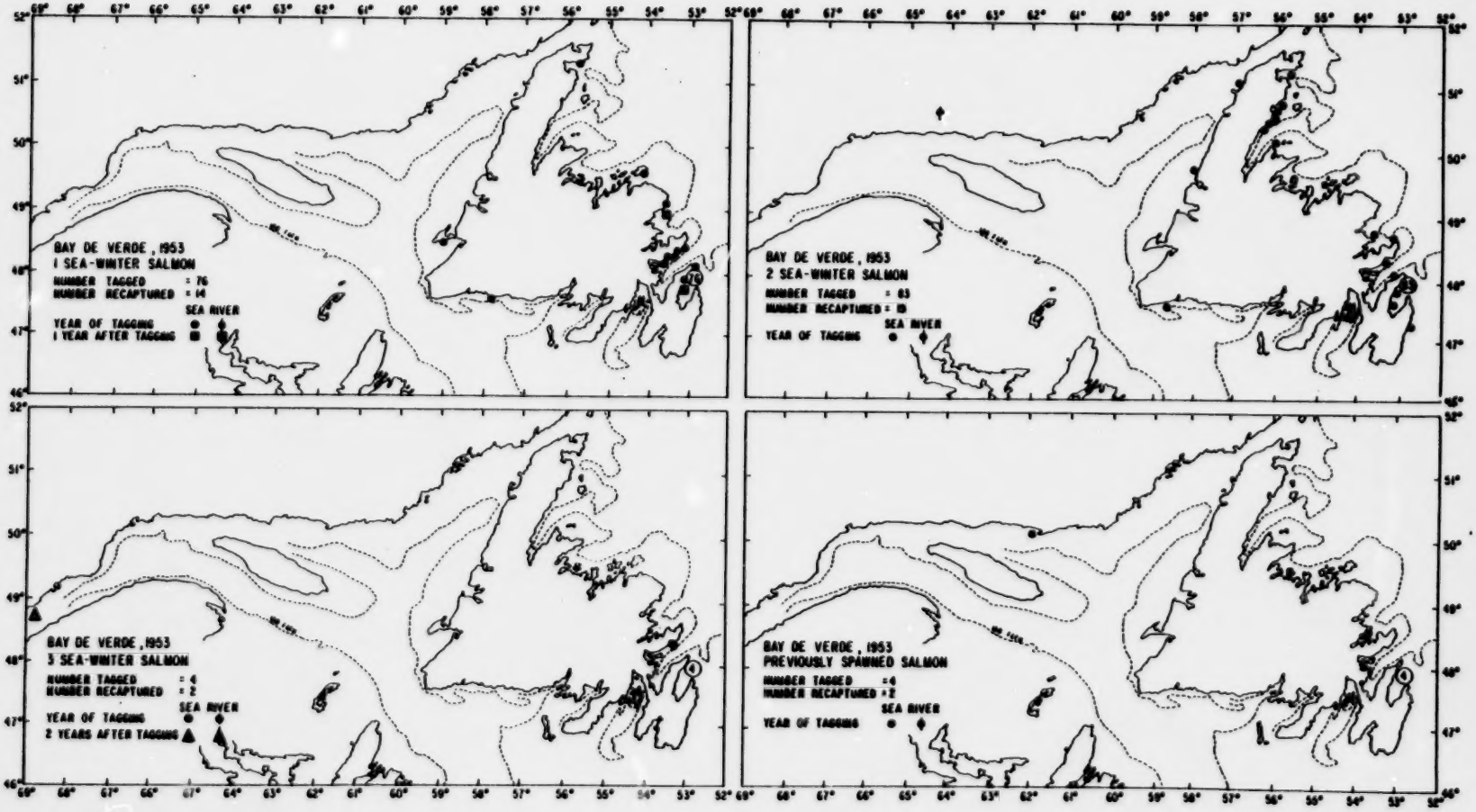

Fig. 13. The tag release and recapture locations for Atlantic salmon tagged at site 14 near Bay de Verde, Newfoundland in 1953.

Table 15. Summary of Atlantic salmon tagging experiment at site 15 near Baccalieu Island, Newfoundland in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Baccalieu Island (48°09'05"N; 52°21'48"W)
2. Date: June 16, 1973
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 16	14	1973	3	-	-	-	-	-	-	-	3	-	3
2	June 16	1	1973	1	-	-	-	-	-	-	-	1	-	1
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	-	10	4	-	-	-	-	-	-	3.286	0.469
2	-	-	1	-	-	-	-	-	-	-	3.000	0.000
3												
PS												

Sea age	River ages of salmon recaptured in																		
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	-	1	2	-	-	3.667	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

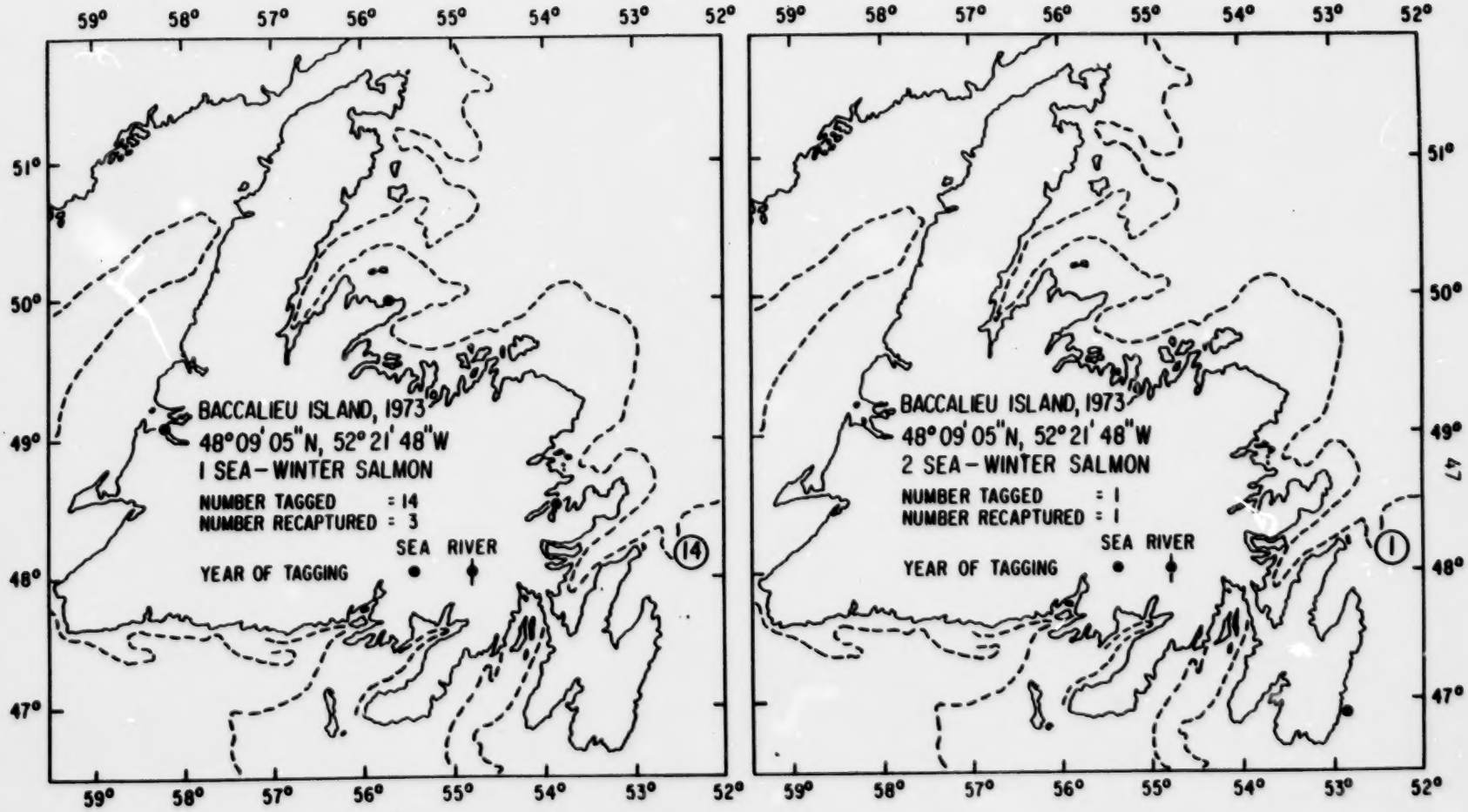

Fig. 14. The tag release and recapture locations for Atlantic salmon tagged at site 15 near Baccalieu Island, Newfoundland in 1973.

Table 16. Summary of Atlantic salmon tagging experiment at site 16 near Heart's Content, Newfoundland in 1975. (S=sea recaptures, R=river recaptures)

1. Tagging area: Hearts Content ($47^{o}53'30"N$; $53^{o}23'30"W$)

2. Date: May 17 - June 23, 1975

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon Traps and Moored nets.

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	May 20-June 23	38	1975	4	-	-	-	-	-	-	-	4	-	4
2	May 17-June 17	21	1975	3	-	-	-	1	-	-	-	4	-	4
3	May 19-June 23	6												
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	2	19	14	2	-	-	-	-	1	3.432	0.689
2	-	6	14	1	-	-	-	-	-	-	2.762	0.539
3	-	3	2	1	-	-	-	-	-	-	2.667	0.816
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1	-	-	4	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	1	1	1	-	-	3.000	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000
3																					
PS																					

PS = previous spawners
S = sea
R = river

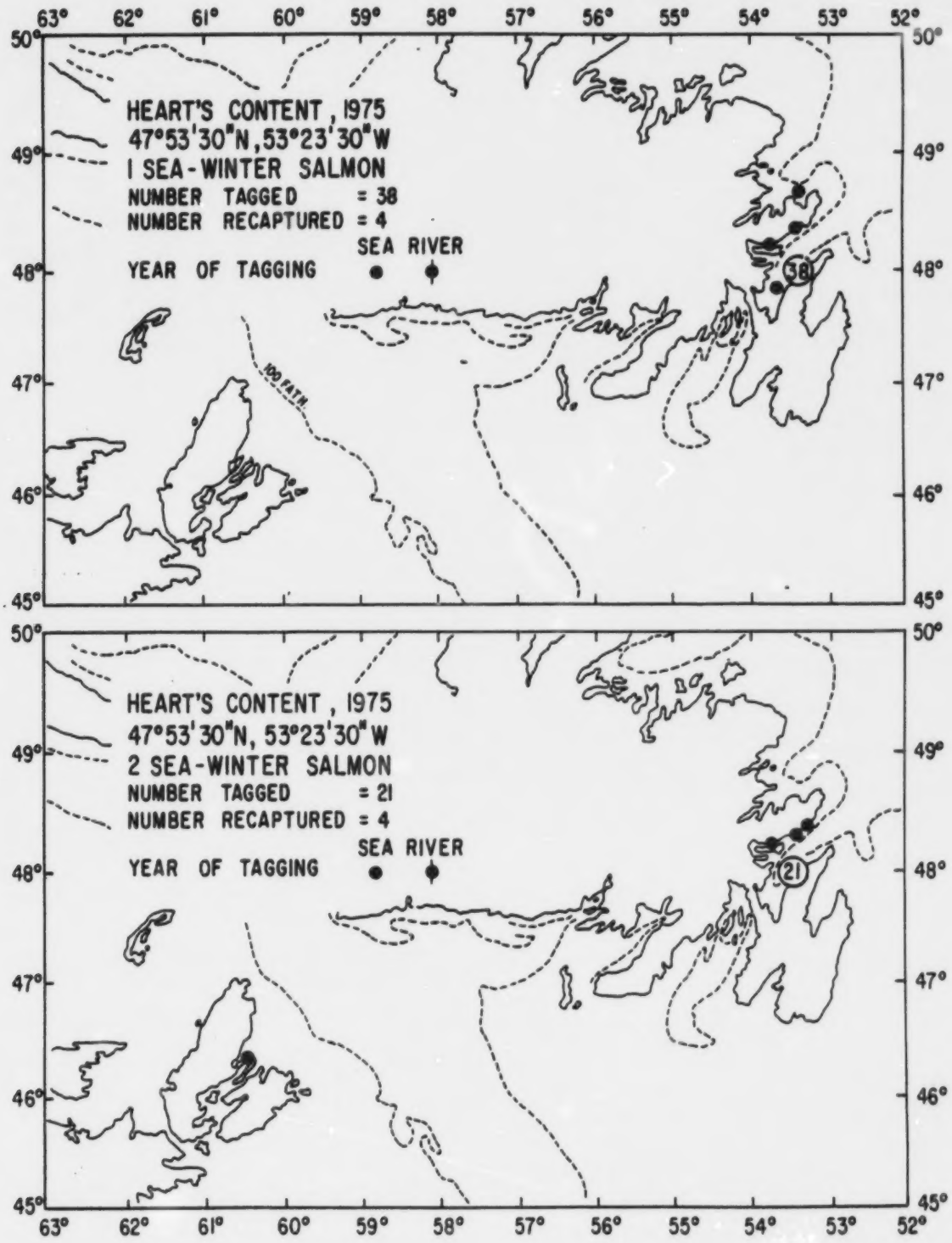

Fig. 15. The tag release and recapture locations for Atlantic salmon tagged at site 16 near Heart's Content, Newfoundland in 1975.

Table 17. Summary of Atlantic salmon tagging experiment at site 17 near Bonavista, Newfoundland in 1940. (S=sea recaptures, R=river recaptures)

1. Tagging area: Bonavista
2. Date: June 8 - 28, 1940
3. Type of tag: Light red celluloid, 31 mm x 8 mm x 0.8 mm and wired with nickel 0.8 mm diameter wire.
4. Method of attachment: Single loop of wire through the musculature immediately in front of dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Traps.

Release data			Year of recapture	Number recaptured										Grand total
				Nfld.		Labrador		Maritimes		Quebec		Total		
Sea age	Date tagged	No. tagged		S	R	S	R	S	R	S	R	S	R	
1	June 8-28	386	1940	127	3	-	-	5	4	1	-	133	7	140
			1941	8	1	-	-	-	1	-	-	8	2	10
			1942	1	-	-	-	-	-	-	-	1	-	1
2	June 10-28	50	1940	13	-	1	-	4	2	1	-	19	2	21
			1941	-	-	-	-	-	1	-	-	-	1	1
3	June 8-28	9	1940	1	-	-	-	2	-	-	-	3	-	3
4	June 8-28	2	1940	1	-	-	-	1	-	-	-	2	-	2
PS	June 8-28	7	1940	1	-	-	-	1	-	-	-	2	-	2

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	UNAVAILABLE											
2												
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	UNAVAILABLE																				
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

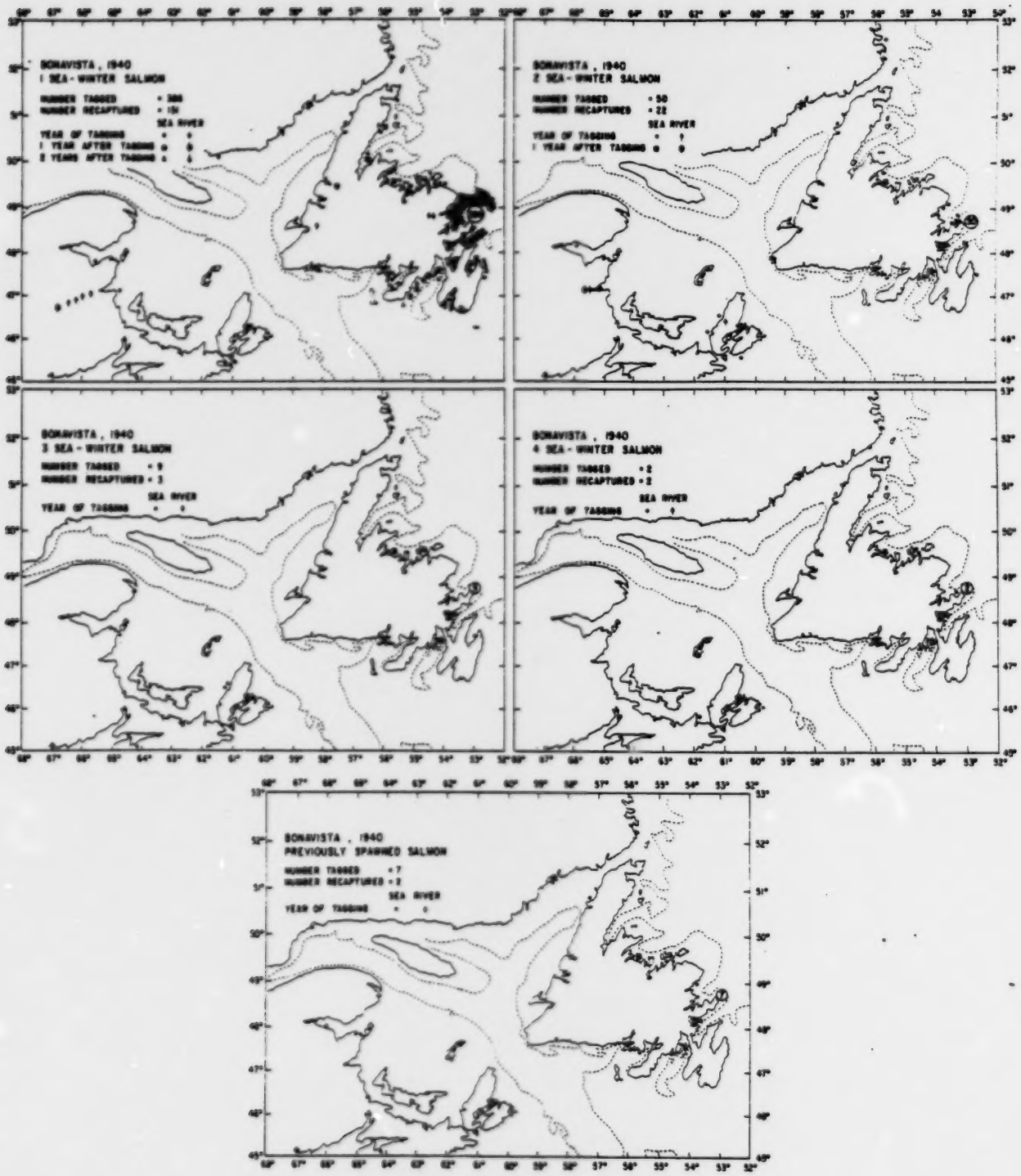

Fig. 16. The tag release and recapture locations for Atlantic salmon tagged at site 17 near Bonavista, Newfoundland in 1940.

Table 18. Summary of Atlantic salmon tagging experiment at site 18 near Cape Bonavista, Newfoundland in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Cape Bonavista ($48^{o}45'30"N$; $52^{o}49'05"W$)

2. Date: June 17, 1973

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon Driftnets.

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 17	20	1973	5	-	-	-	-	-	-	-	5	-	5
2	June 17	5		-	-	-	-	-	-	-	-	-	-	-
3														
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	4	12	3	1	-	-	-	-	-	3.050	0.759
2	-	3	2	-	-	-	-	-	-	-	2.400	0.548
3												
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1	-	2	2	1	-	-	2.800	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

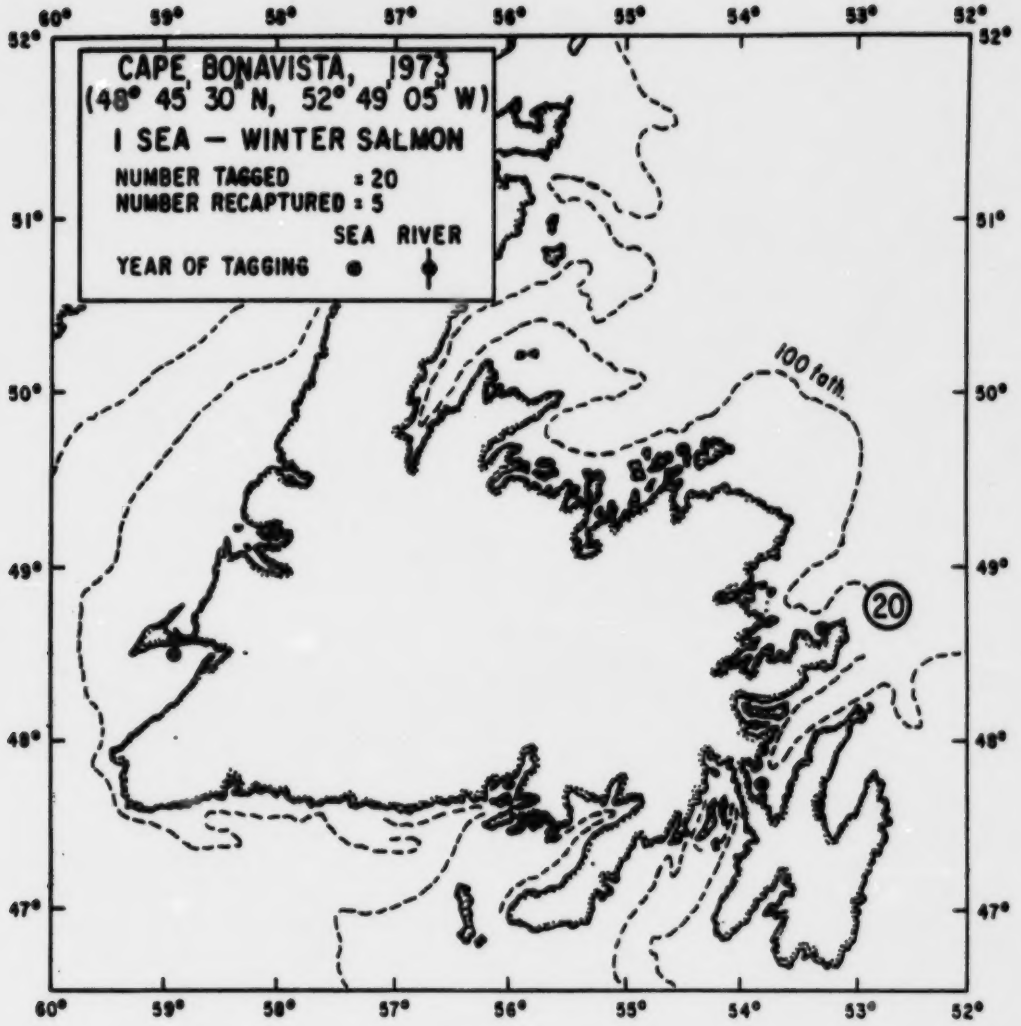

Fig. 17. The tag release and recapture locations for Atlantic salmon tagged at site 18 near Cape Bonavista, Newfoundland in 1973.

Table 19. Summary of Atlantic salmon tagging experiment at site 19 near Flat Island, Bonavista Bay, Newfoundland in 1952. (S=sea recaptures, R=river recaptures)

1. Tagging area: Flat Island, Bonavista Bay

2. Date: May 31 - July 25, 1952

3. Type of tag: Dark red vinyl, 31 mm x 8 mm x 0.8 mm and wired with nickel 0.6 mm diameter wire.

4. Method of attachment: Single loop of wire through the musculature immediately in front of dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon Trap and Set Gillnets.

Release data			Year of recapture	Number recaptured										Grand total
				Nfld.		Labrador		Maritimes		Quebec		Total		
Sea age	Date tagged	No. tagged		S	R	S	R	S	R	S	R	S	R	
1	May 31 - July 25	256	1952	40	1	-	-	-	-	-	-	40	1	41
			1953	2	-	-	-	-	1	-	-	2	1	3
			1954	1	-	-	-	-	-	-	-	1	-	1
			1955	1	-	-	-	-	-	-	-	1	-	1
2	June 9 - July 1	12	1952	3	-	-	-	2	-	-	-	5	-	5
3														
PS	June 10 - July 19	18	1952	3	-	-	-	-	-	-	-	3	-	3

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	UNAVAILABLE											
2												
3												
PS												

Sea age	River ages of salmon recaptured in																		
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	UNAVAILABLE																				
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

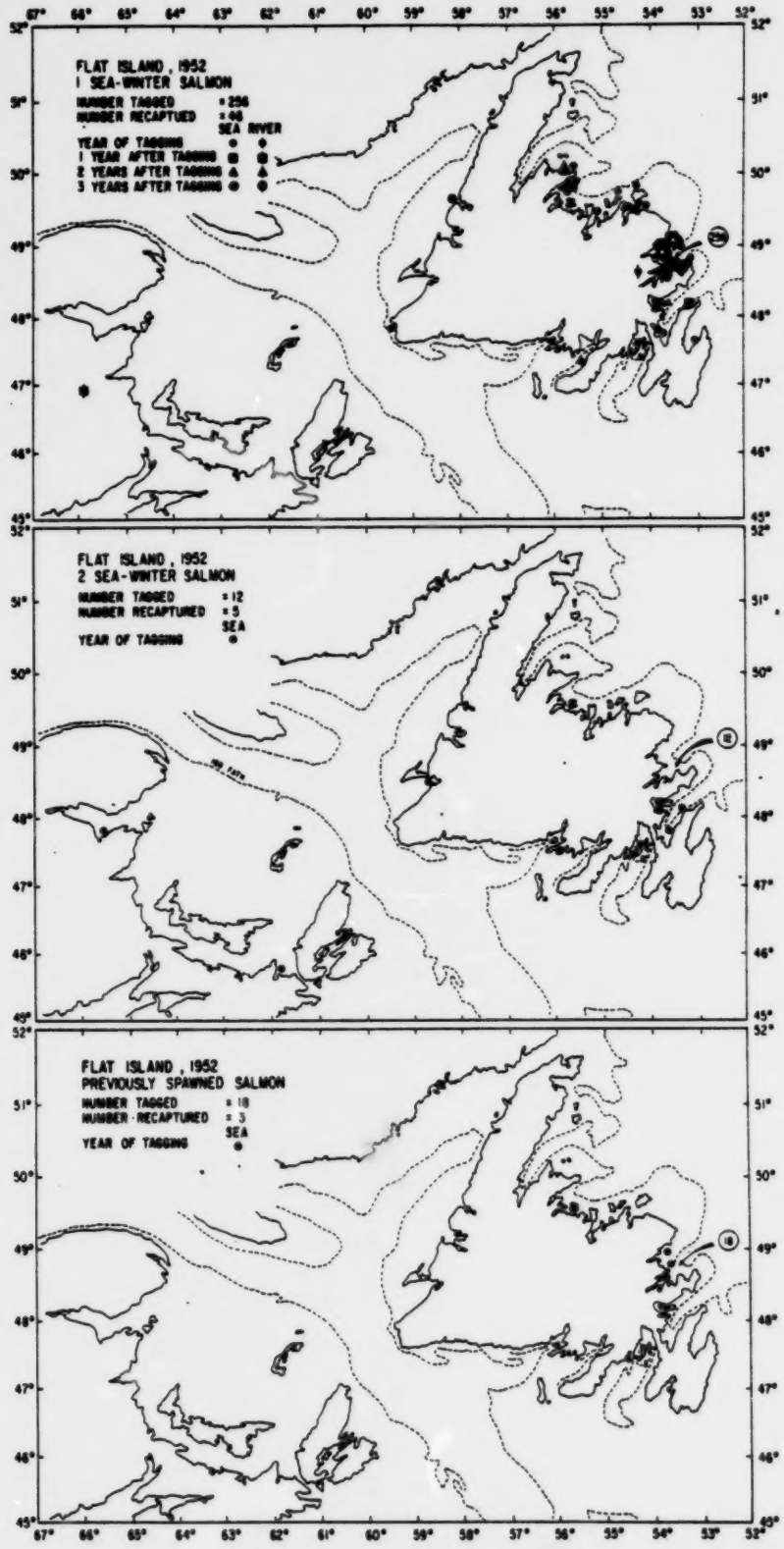

Fig. 18. The tag release and recapture locations for Atlantic salmon tagged at site 19 near Flat Island, Newfoundland in 1952.

Table 20. Summary of Atlantic salmon tagging experiment at site 20 near Cape Freels, Newfoundland in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Cape Freels (49°12'23"N; 53°14'20"W)

2. Date: June 20, 1973

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon Driftnets.

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 20	25	1973	2	1	1	-	-	-	-	-	3	1	4
			1974	1	-	-	-	-	-	-	-	1	-	1
2	June 20	11	1973	4	-	-	-	-	-	-	-	4	-	4
3														
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	12	9	1	3	-	-	-	-	-	2.800	1.000
2	-	4	3	1	-	1	-	-	-	2	3.000	1.323
3												
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	?	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1	-	3	1	-	-	-	2.250	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-
2	-	1	1	-	-	2	2.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

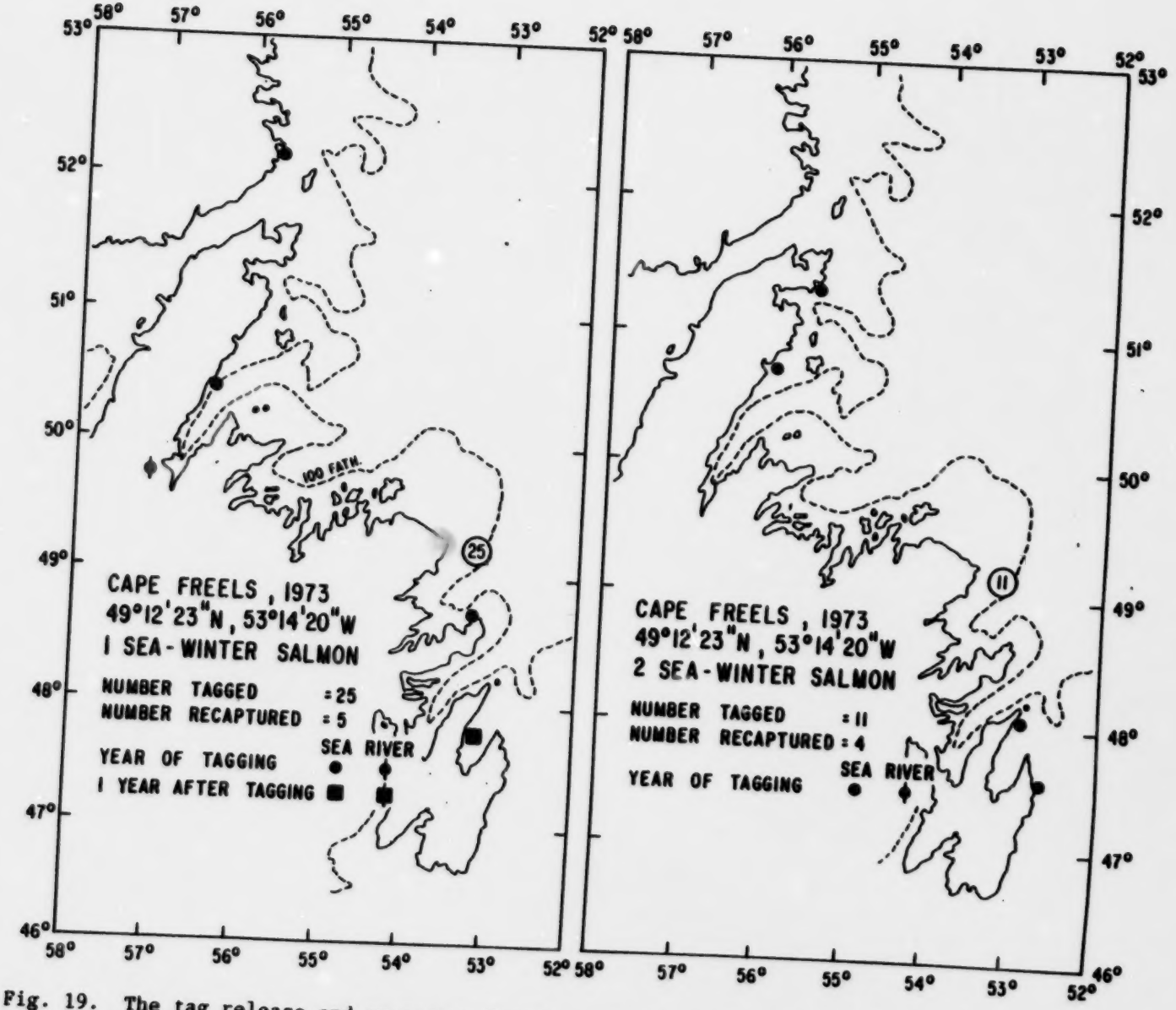

Fig. 19. The tag release and recapture locations for Atlantic salmon tagged at site 20 near Cape Freels, Newfoundland in 1973.

Table 21. Summary of Atlantic salmon tagging experiment at site 21 near Fogo Island, Newfoundland in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Fogo Island (49°41'08"N; 53°38'05"W)
2. Date: June 28, 1973
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
			1973	6	-	-	-	1	-	-	-	7	-	7
1	June 28	23	1974	2	-	-	-	-	-	-	-	2	-	2
2	June 28	2												
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	4	10	8	-	-	-	-	-	1	3.182	0.733
2	-	1	-	1	-	-	-	-	-	-	3.000	1.414
3												
PS												

Sea age	River ages of salmon recaptured in																		
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	?	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	2	3	2	-	1	3.000	-	-	-	-	-	-	-	-	-	-	1	-	-	4.000
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

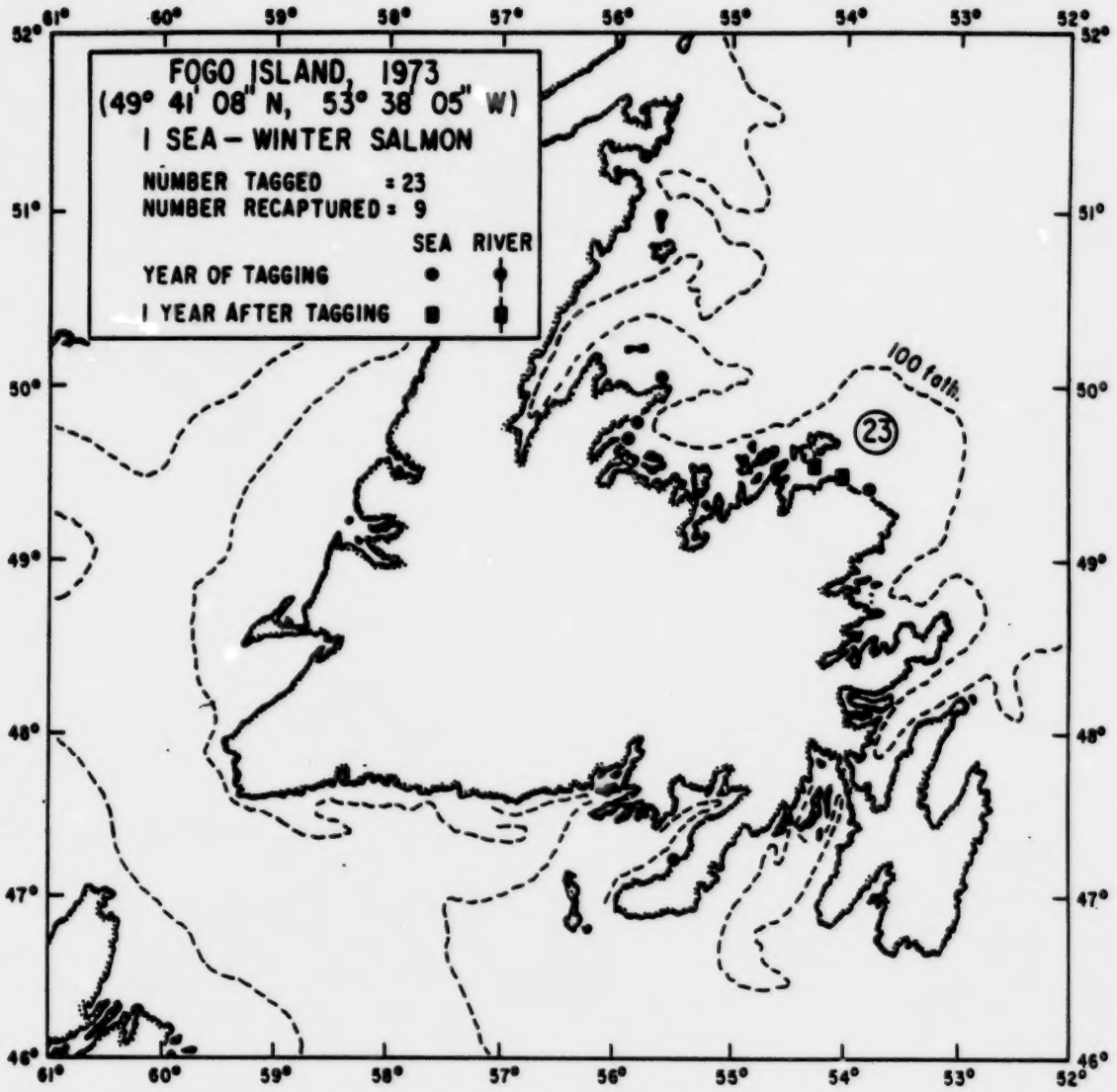
FOGO ISLAND, 1973
(49° 41' 08" N, 53° 38' 05" W)
1 SEA – WINTER SALMON
NUMBER TAGGED = 23
NUMBER RECAPTURED = 9
SEA RIVER
YEAR OF TAGGING
1 YEAR AFTER TAGGING
100 fath.
23
61° 60° 59° 58° 57° 56° 55° 54° 53° 52°
52° 51° 50° 49° 48° 47° 46°

Fig. 20. The tag release and recapture locations for Atlantic salmon tagged at site 21 near Fogo Island, Newfoundland in 1973.

Table 22. Summary of Atlantic salmon tagging experiment at site 22 near Change Islands, Newfoundland in 1951. (S=sea recaptures, R=river recaptures)

1. Tagging area: Change Islands

2. Date: May 28 - August 7, 1951

3. Type of tag: Light red celluloid, 31 mm x 8 mm x 0.8 mm and wired with nickel 0.8 mm diameter wire.

4. Method of attachment: Single loop of wire through the musculature immediately in front of dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Set Gillnets.

Release data			Year of recapture	Number recaptured										
Sea age	Date tagged	No. tagged		Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 11 - August 7	141	1951	26	3	-	-	-	-	-	-	26	3	29
			1952	2	-	-	-	-	-	-	-	2	-	2
2	May 28 - July 26	7	1951	2	-	-	-	1	-	-	-	3	-	3
3	July 26	1												
PS	May 29 - July 16	7	1951	1	-	-	-	-	-	-	-	1	-	1

4 fish (1 sea year) passed through counting fence on Gander River 1951 (not included above)

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1												
2												
3												
PS												

Sea age	River ages of salmon recaptured in																		
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1																					
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

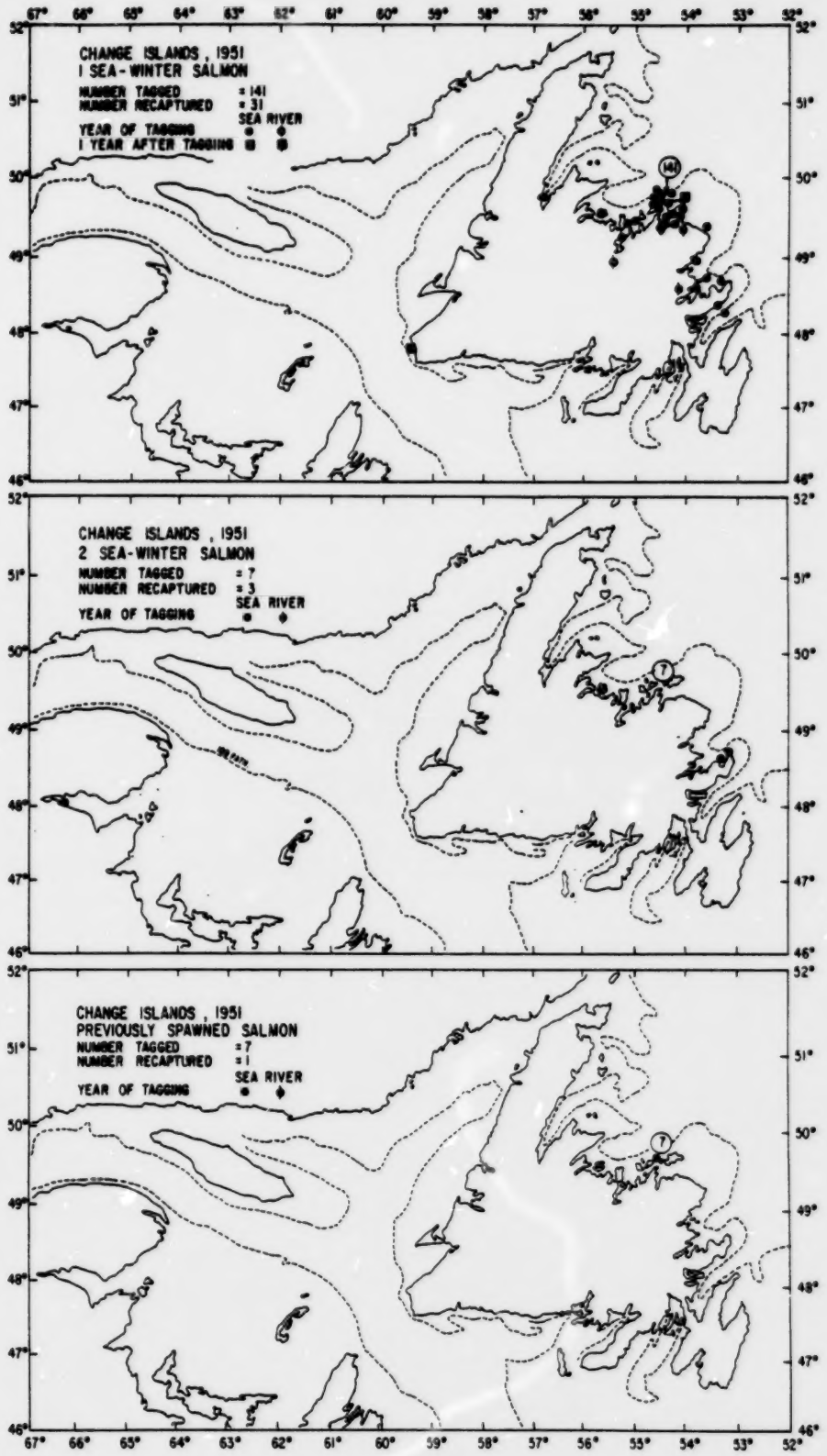

Fig. 21. The tag release and recapture locations for Atlantic salmon tagged at site 22 near Change Islands, Newfoundland in 1951.

Table 23. Summary of Atlantic salmon tagging experiment at site 23 near Twillingate, Newfoundland in 1952. (S=sea recaptures, R=river recaptures)

1. Tagging area: Twillingate
2. Date: November 22 - December 11, 1952
3. Type of tag: Light red celluloid, 31 mm x 8 mm x 0.8 mm and wired with nickel 0.8 mm diameter wire.
4. Method of attachment: Single loop of wire through the musculature immediately in front of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Set Gillnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	November 22-December 11	17	1953	-	-	-	-	-	1	-	-	-	1	1
2	November 24-December 10	14	1953	1	-	-	-	1	-	1	-	3	-	3
3														
PS	November 24-December 9	5												

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	10	7	-	-	-	-	-	-	-	2.412	0.507
2	-	3	10	-	-	-	-	-	-	-	2.769	0.439
3												
PS	-	1	4	-	-	-	-	-	-	-	2.800	0.447

Sea age	River ages of salmon recaptured in																		
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000
2	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000
3																					
PS																					

PS = previous spawners
S = sea
R = river

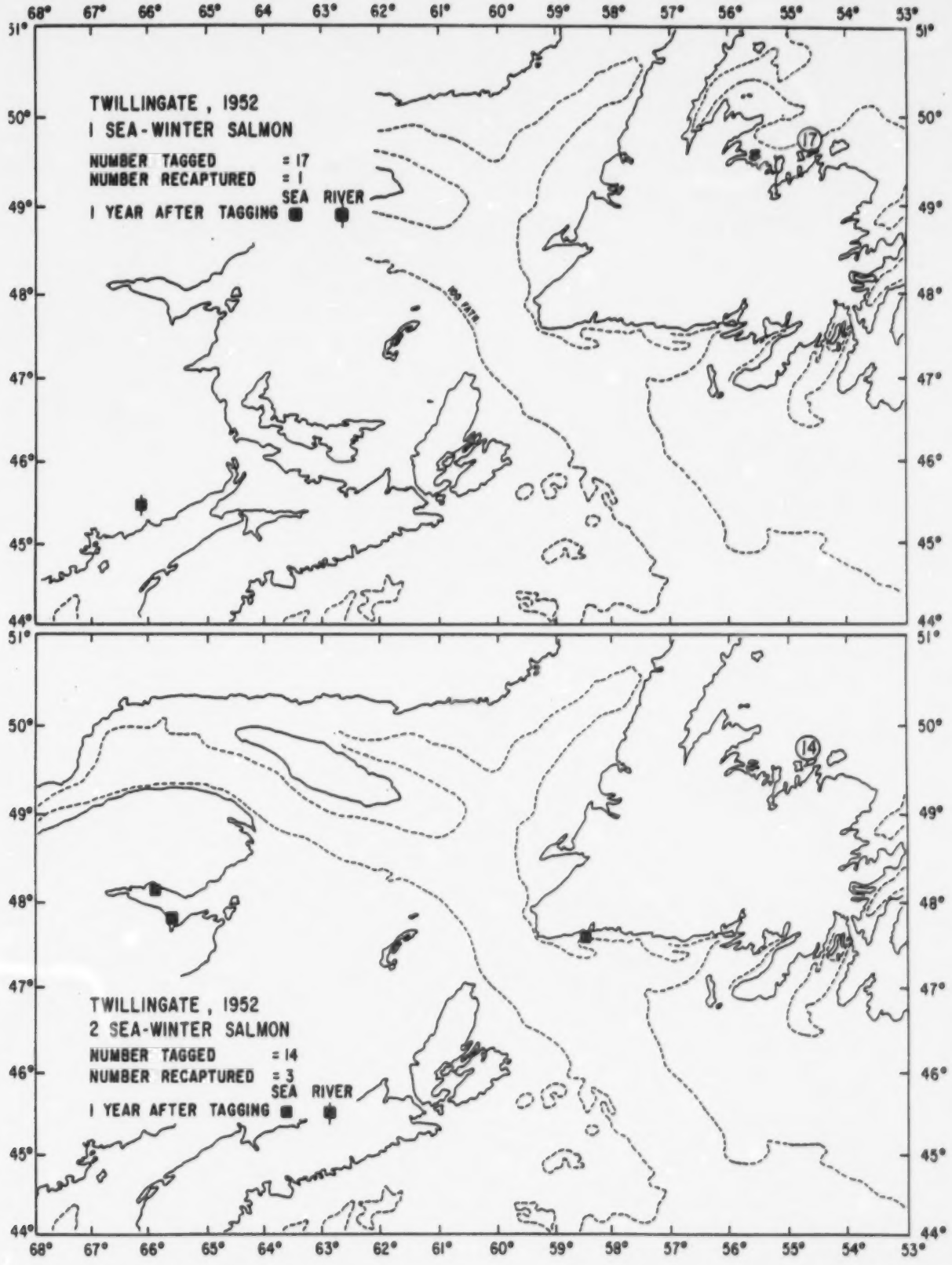

Fig. 22. The tag release and recapture locations for Atlantic salmon tagged at site 23 near Twillingate, Newfoundland in 1952.

Table 24. Summary of Atlantic salmon tagging experiment at site 24 near Twillingate, Newfoundland in 1975. (S=sea recaptures, R=river recaptures)

1. Tagging area: Twillingate (49°40'00" 54°51'08")

2. Date: October 25, 1975

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle approximately 8 mm apart was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon driftnets (moored)

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1														
2	Oct. 25	1	-	-	-	-	-	-	-	-	-	-	-	-
3														
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1												
2	-	-	1	-	-	-	-	-	-	-	3.000	0.000
3												
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1																					
2																					
3																					
PS																					

Table 25. Summary of Atlantic salmon tagging experiment at site 25 near Cape St. John, Newfoundland in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Cape St. John (50°04'15"N; 55°15'48"W)
2. Date: June 21, 1973
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 21	88	1973	18	2	-	-	-	1*	1	-	19	3	22
			1974	1	-	-	-	-	-	-	-	1	-	1
2	June 21	26	1973	4	-	1	1	-	-	-	-	5	1	6
			1974	1	-	-	-	-	-	-	-	1	-	1
3														
PS	June 21	1		-	-	-	-	-	-	-	-	-	-	-

* This fish, Sea Age 1, River Age 2, passed through the Millbank Trap System July 25, 1973 and later through Curventon Trap System, S.W. Miramichi September 23, 1973 and finally was recaptured at Quirpon, Newfoundland July 4, 1975.

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	24	39	20	4	1	-	-	-	-	3.080	0.887
2	-	5	14	3	2	2	-	-	-	-	3.308	1.123
3												
PS	-	-	-	1	-	-	-	-	-	-	4.000	0.000

Sea age	River ages of salmon recaptured in																		
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	3	10	6	1	1	3.381	-	-	-	-	-	-	-	-	1	1	-	-	-	2.500
2	-	-	3	1	1	-	3.600	-	-	-	1	-	1	5.000	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

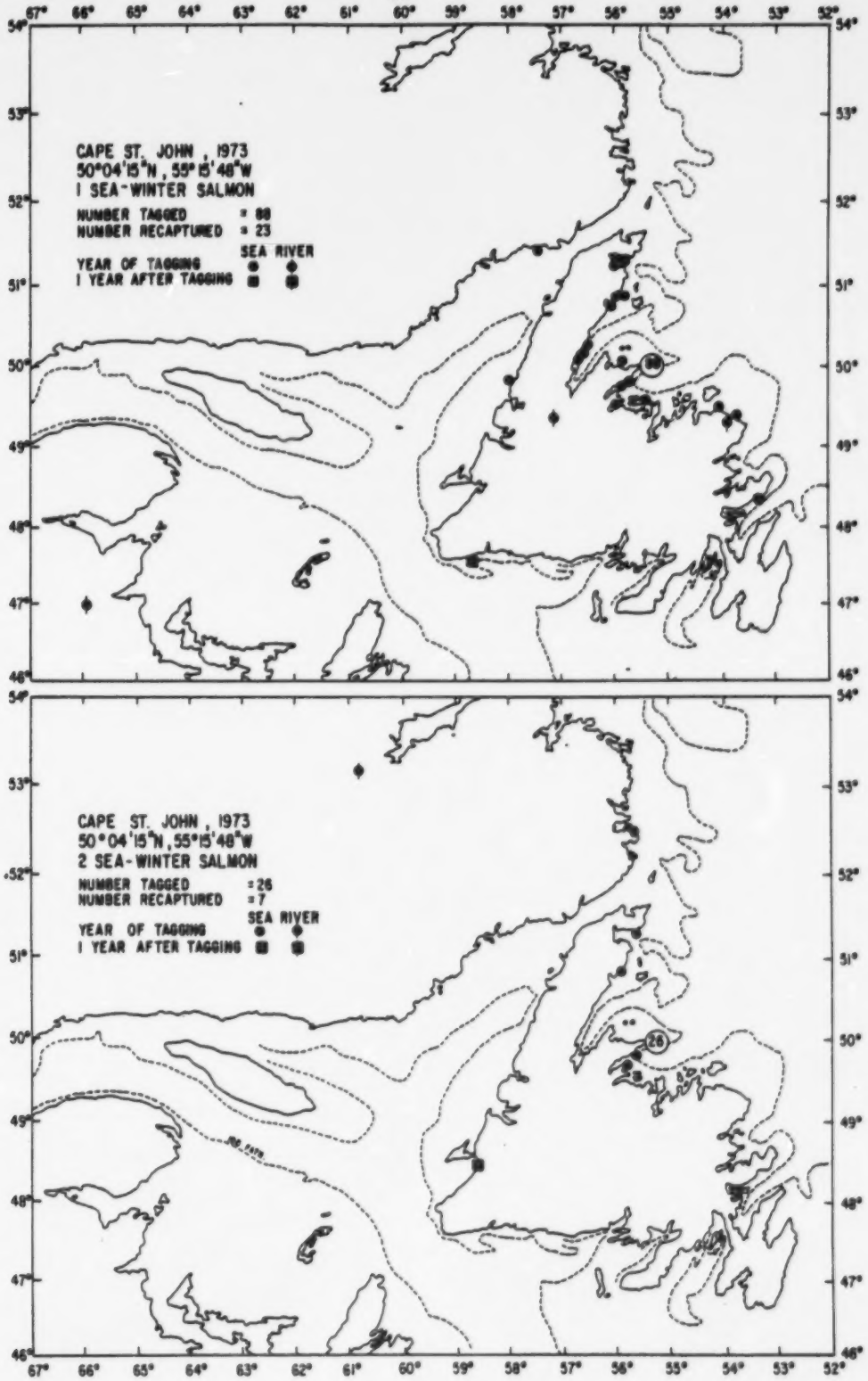

Fig. 23. The tag release and recapture locations for Atlantic salmon tagged at site 25 near Cape St. John, Newfoundland in 1973.

Table 26. Summary of Atlantic salmon tagging experiment at site 26 near Cape Fox, Newfoundland in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Cape Fox ($50^{o}45'38"N$; $55^{o}49'08"W$)

2. Date: June 22, 1973

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 22	24	1973	6	-	-	-	-	-	-	-	6	-	6
2	June 22	11	1973	3	-	-	-	-	-	-	-	3	-	3
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	6	8	10	-	-	-	-	-	-	3.167	0.816
2	-	2	3	6	-	-	-	-	-	-	3.364	0.809
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	1	3	2	-	-	3.167	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	1	1	1	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

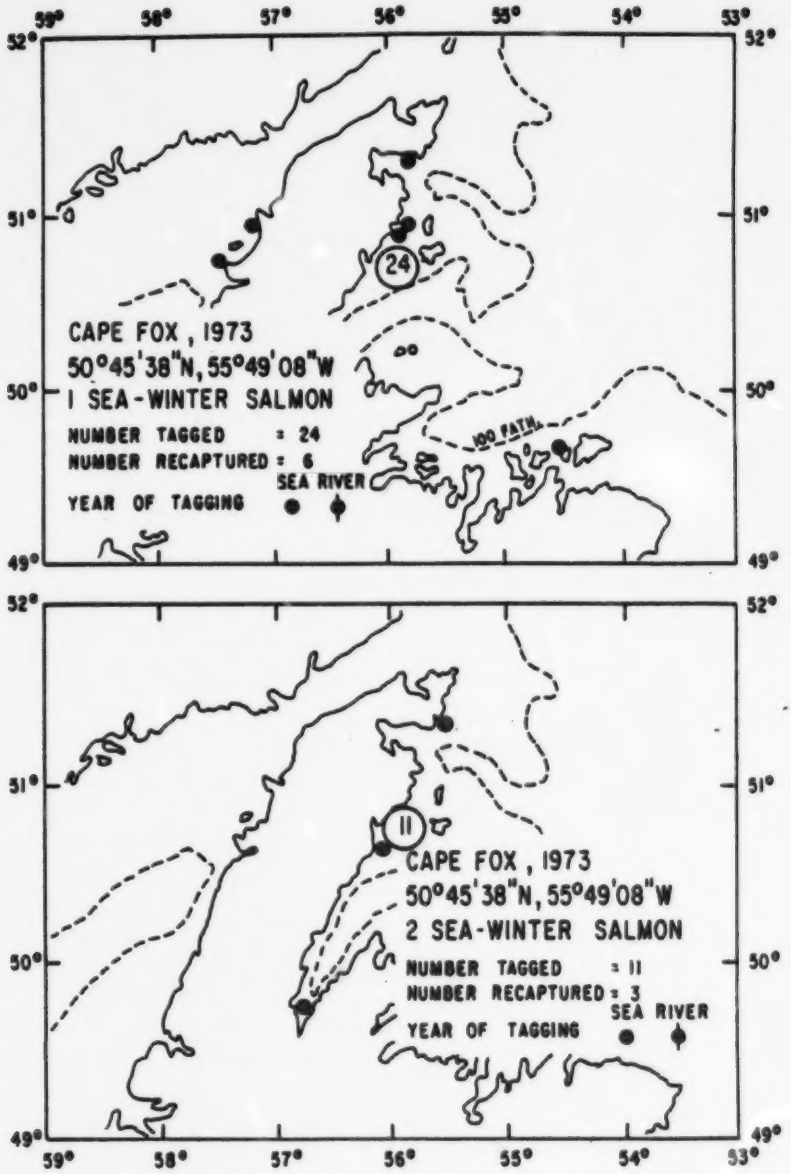

Fig. 24. The tag release and recapture locations for Atlantic salmon tagged at site 26 near Cape Fox, Newfoundland in 1973.

Table 27. Summary of Atlantic salmon tagging experiment at site 27 near Hare Bay, Newfoundland in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Hare Bay (51°15'14"N; 55°39'40"W)
2. Date: June 27, 1973
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 27	51	1973	7	2	-	-	-	1	-	-	7	3	10
			1974											
			1975	-	-	-	-	-	1	-	-	-	1	1
2	June 27	18	1973	5	-	-	-	-	-	-	-	5	-	5
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	8	25	13	1	3	-	-	-	1	3.320	0.978
2	-	5	5	5	3	-	-	-	-	-	3.333	1.085
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	1	5	2	1	-	3.333	-	-	-	-	-	-	-	-	2	-	-	-	-	2.000
2	-	1	1	2	1	-	3.600	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

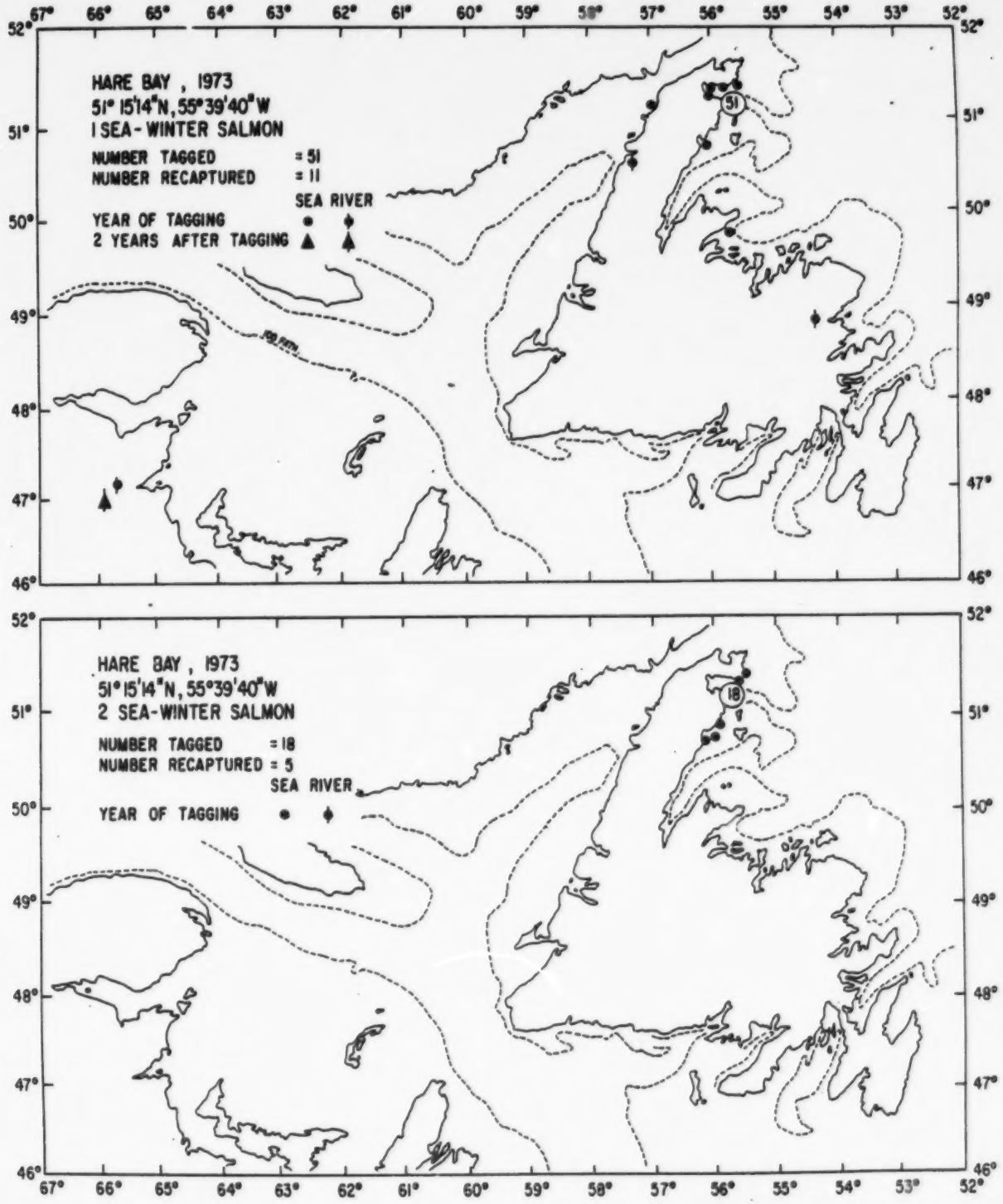

Fig. 25. The tag release and recapture locations for Atlantic salmon tagged at site 27 in Hare Bay, Newfoundland in 1973.

Table 28. Summary of Atlantic salmon tagging experiment at site 28 near Henley Harbour, Labrador in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Henley Harbour ($52^{o}00'53"N$; $55^{o}37'53"W$)
2. Date: June 23, 1973
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 23	1		-	-	-	-	-	-	-	-	-	-	-
2	June 23	18	1973	-	-	5	-	-	-	-	-	5	-	5
3														
PS	June 23	4	1973	-	-	-	1	-	-	-	-	-	1	1

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	-	-	-	1	-	-	-	-	-	5.000	0.000
2	-	-	7	7	3	-	-	-	-	1	3.765	0.752
3												
PS	-	-	1	3	-	-	-	-	-	-	3.750	0.500

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1																					
2	-	-	-	-	-	-	-	-	-	1	3	1	-	4.000	-	-	-	-	-	-	-
3																					
PS	-	-	-	-	-	-	-	-	-	-	1	-	-	4.000	-	-	-	-	-	-	-

PS = previous spawners
S = sea
R = river

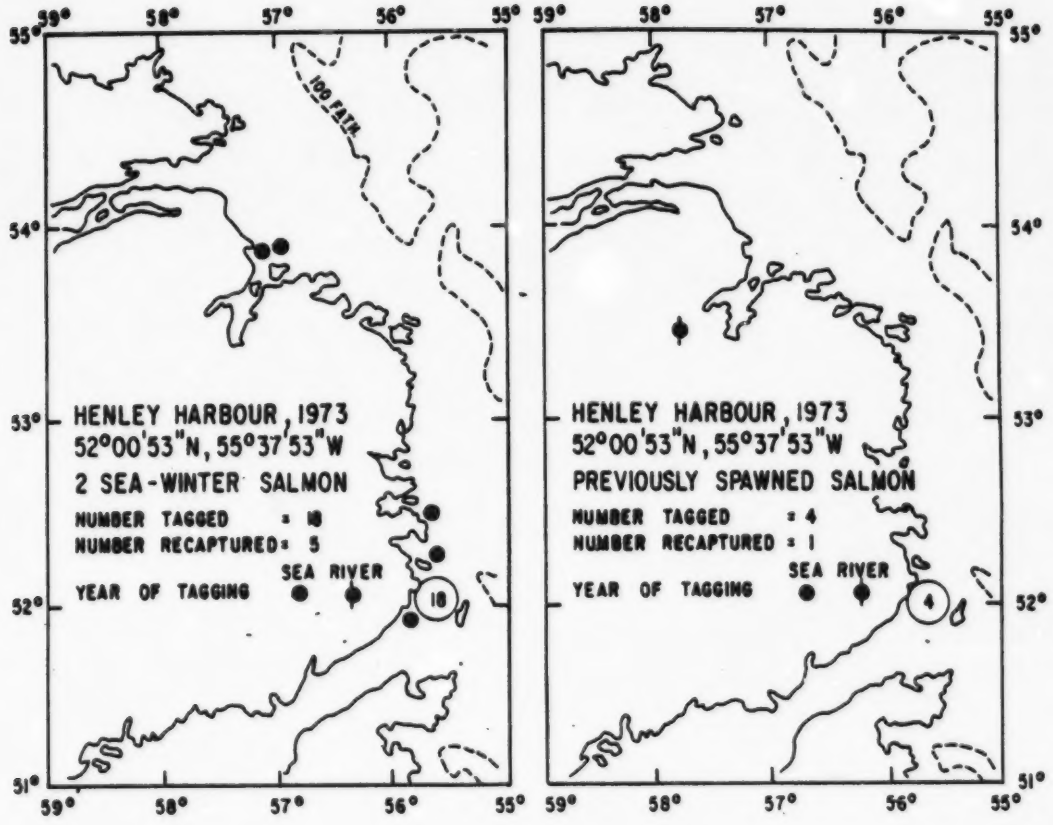

Fig. 26. The tag release and recapture locations for Atlantic salmon tagged at site 28 near Henley Harbour, Labrador in 1973.

Table 29. Summary of Atlantic salmon tagging experiment at site 29 near Cape Charles, Labrador in 1948. (S=sea recaptures, R=river recaptures)

1. Tagging area: Cape Charles, Labrador

2. Date: June 30 - July 10, 1948

3. Type of tag: Light red celluloid, 31 mm x 8 mm x 0.8 mm and wired with nickel 0.8 mm diameter wire.

4. Method of attachment: Single loop of wire through the musculature immediately in front of dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Set Gillnets.

Release data			Year of recapture	Number recaptured										Grand total
				Nfld.		Labrador		Maritimes		Quebec		Total		
Sea age	Date tagged	No. tagged		S	R	S	R	S	R	S	R	S	R	
1	July 5-10	24	1948	-	-	2	-	-	-	-	-	2	-	2
2	June 30 - July 9	34	1948	-	1	5	-	-	-	-	-	5	1	6
3	June 30 - July 10	1												
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	UNAVAILABLE											
2												
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	UNAVAILABLE																				
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

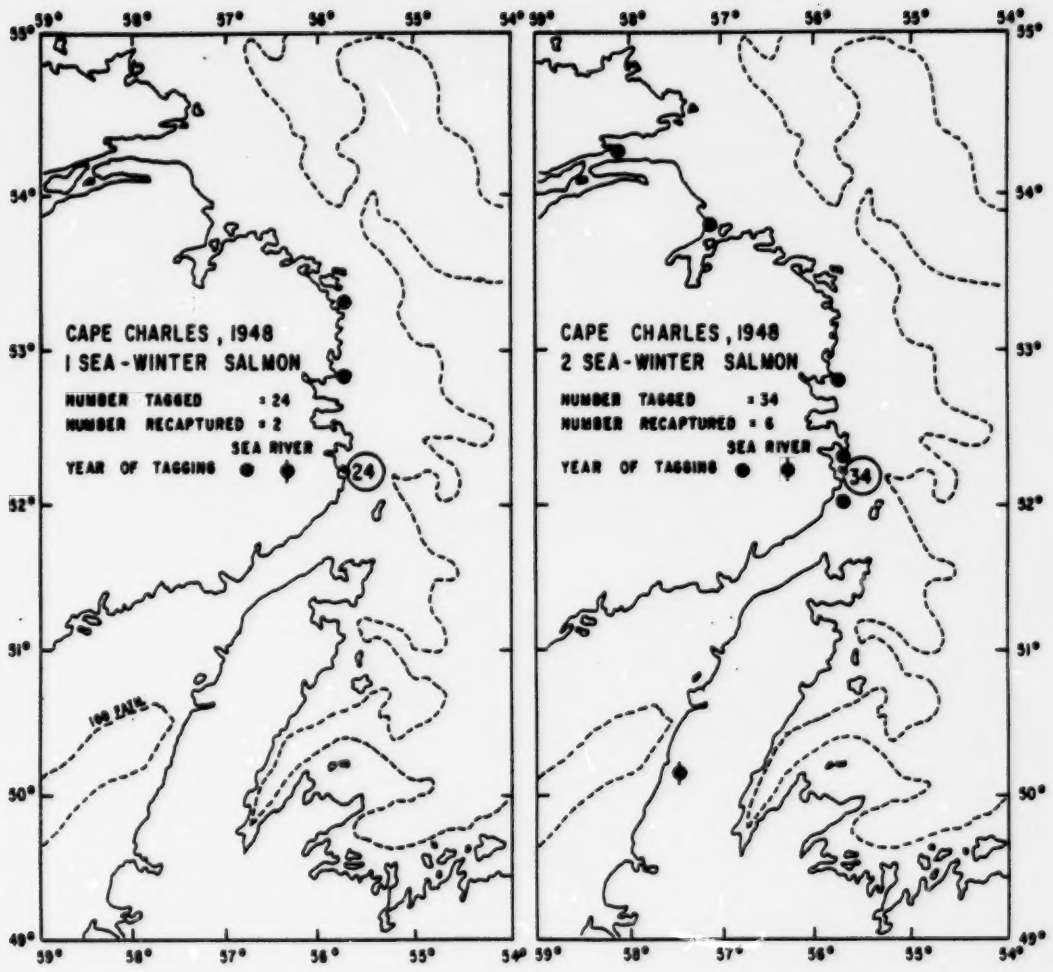

Fig. 27. The tag release and recapture locations for Atlantic salmon tagged at site 29 near Cape Charles, Labrador in 1948.

Table 30. Summary of Atlantic salmon tagging experiment at site 30 near Francis Harbour Bight, Labrador in 1950. (S=sea recaptures, R=river recaptures)

1. Tagging area: Francis Harbour Bight, Labrador
2. Date: June 28 - July 18, 1950
3. Type of tag: Light red celluloid, 31 mm x 8 mm x 0.8 mm and wired with nickel 0.8 mm diameter wire.
4. Method of attachment: Single loop of wire through the musculature immediately in front of dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Set Gillnets.

Sea age	Release data: Date tagged	No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 29 - July 18	41	1950	1	-	2	-	-	-	-	-	3	-	3
2	June 28 - July 18	70	1950	-	-	10	-	-	-	-	-	10	-	10
3	June 28 - July 18	1												
PS	June 28 - July 18	3	1950	-	-	1	-	-	-	-	-	1	-	1

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1	UNAVAILABLE											
2												
3												
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1	UNAVAILABLE																				
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

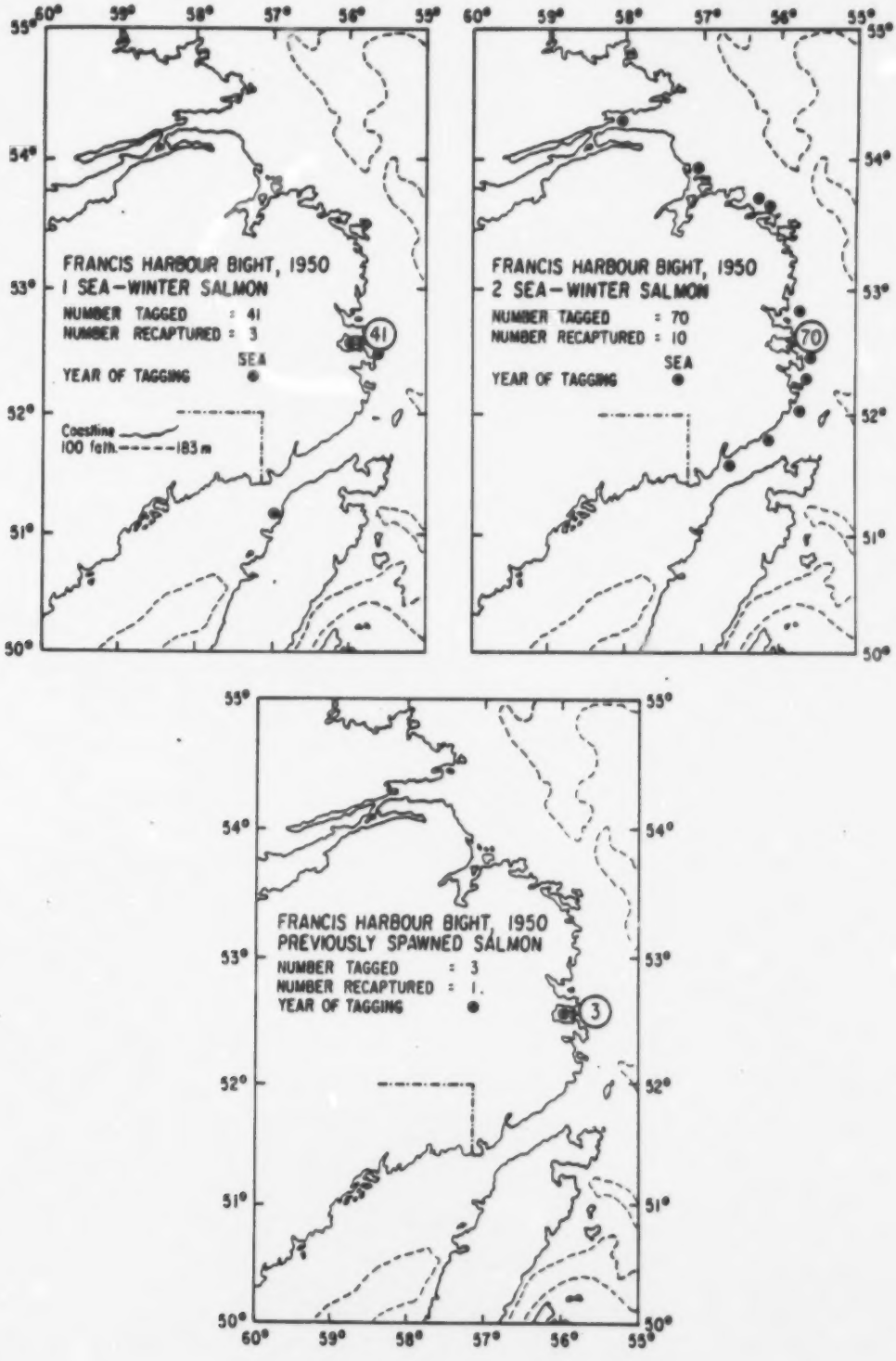

Fig. 28. The tag release and recapture locations for Atlantic salmon tagged at site 30 near Francis Harbour Bight, Labrador in 1950.

Table 31. Summary of Atlantic salmon tagging experiment at site 31 near Snug Harbour, Labrador in 1971. (S=sea recaptures, R=river recaptures)

1. Tagging area: Snug Harbour, Labrador ($52^{o}49'08"N$; $55^{o}45'38"W$)
2. Date: July 31, 1971
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.
5. Type of gear: Salmon Driftnets.

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	July 31	4	1971	-	-	1	-	-	-	-	-	1	-	1
2														
3														
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	1	1	2	-	-	-	-	-	-	3.250	0.957
2												
3												
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1	-	-	-	-	-	-	-	-	1	-	-	-	-	2.000	-	-	-	-	-	-	-
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

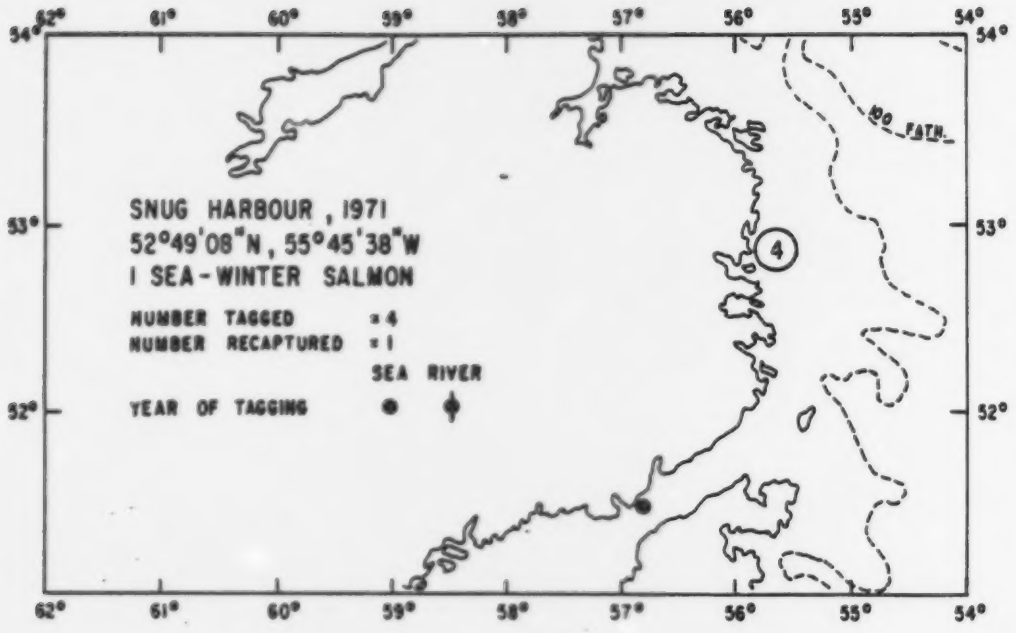

Fig. 29. The tag release and recapture locations for Atlantic salmon tagged at site 31 near Snug Harbour, Labrador in 1971.

Table 32. Summary of Atlantic salmon tagging experiment at site 32 near Square Islands, Labrador in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Square Islands ($52^{o}43'31"N$; $55^{o}35'55"W$)
2. Date: June 26, 1973
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 26	14	1973	1	-	1	1	-	-	-	-	2	1	3
2	June 26	35	1973	1	-	5	-	-	-	-	-	6	-	6
3	June 26	1												
PS	June 26	1												

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	2	3	8	1	-	-	-	-	-	3.571	0.852
2	-	2	5	15	10	3	-	-	-	-	4.200	0.994
3	-	-	-	1	-	-	-	-	-	-	4.000	0.000
PS	-	-	-	1	-	-	-	-	-	-	4.000	0.000

Sea age	River ages of salmon recaptured in																		
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	-	-	1	-	-	4.000	-	-	-	1	1	-	4.500	-	-	-	-	-	-	-
2	-	-	1	-	-	-	3.000	-	-	-	3	1	1	4.600	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

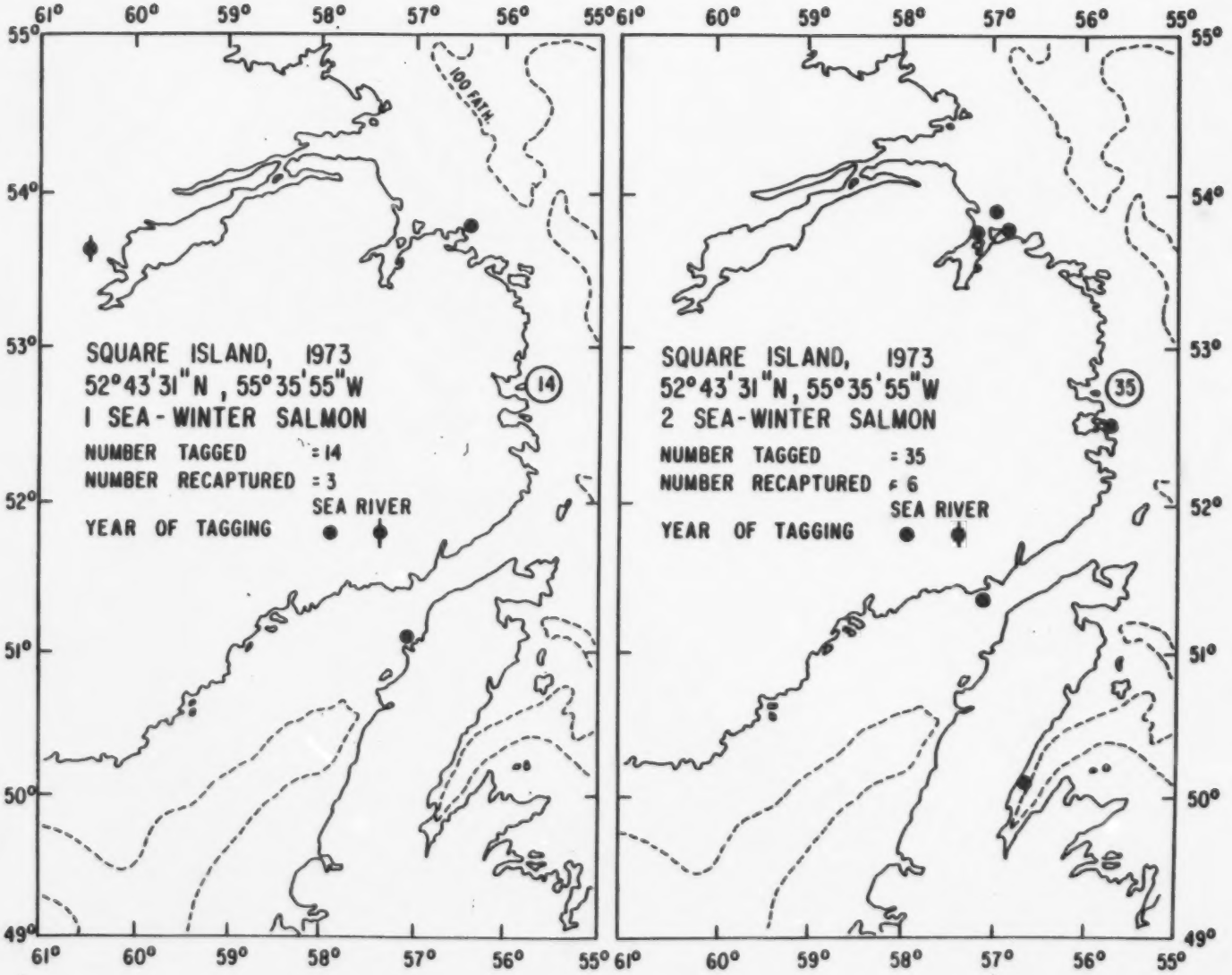

Fig. 30. The tag release and recapture locations for Atlantic salmon tagged at site 32 near Square Islands, Labrador in 1973.

Table 33. Summary of Atlantic salmon tagging experiment at site 33 near Spotted Islands, Labrador in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Spotted Island (53°32'56"N; 55°39'58"W)
2. Date: June 24, 1973
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 24	6	1973	-	-	-	2	-	-	-	-	-	2	2
2	June 24	17	1973	-	-	2	2	-	-	-	-	2	2	4
3														
PS	June 24	2	1973	-	-	1	-	-	-	-	-	1	-	1

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	-	-	4	1	1	-	-	-	-	4.500	0.837
2	-	-	3	9	4	1	-	-	-	-	4.176	0.809
3												
PS	-	-	1	1	-	-	-	-	-	-	3.500	0.707

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1	-	-	-	-	-	-	-	-	-	-	1	1	-	4.500	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	2	2	-	4.500	-	-	-	-	-	-	-
3																					
PS	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-

PS = previous spawners
S = sea
R = river

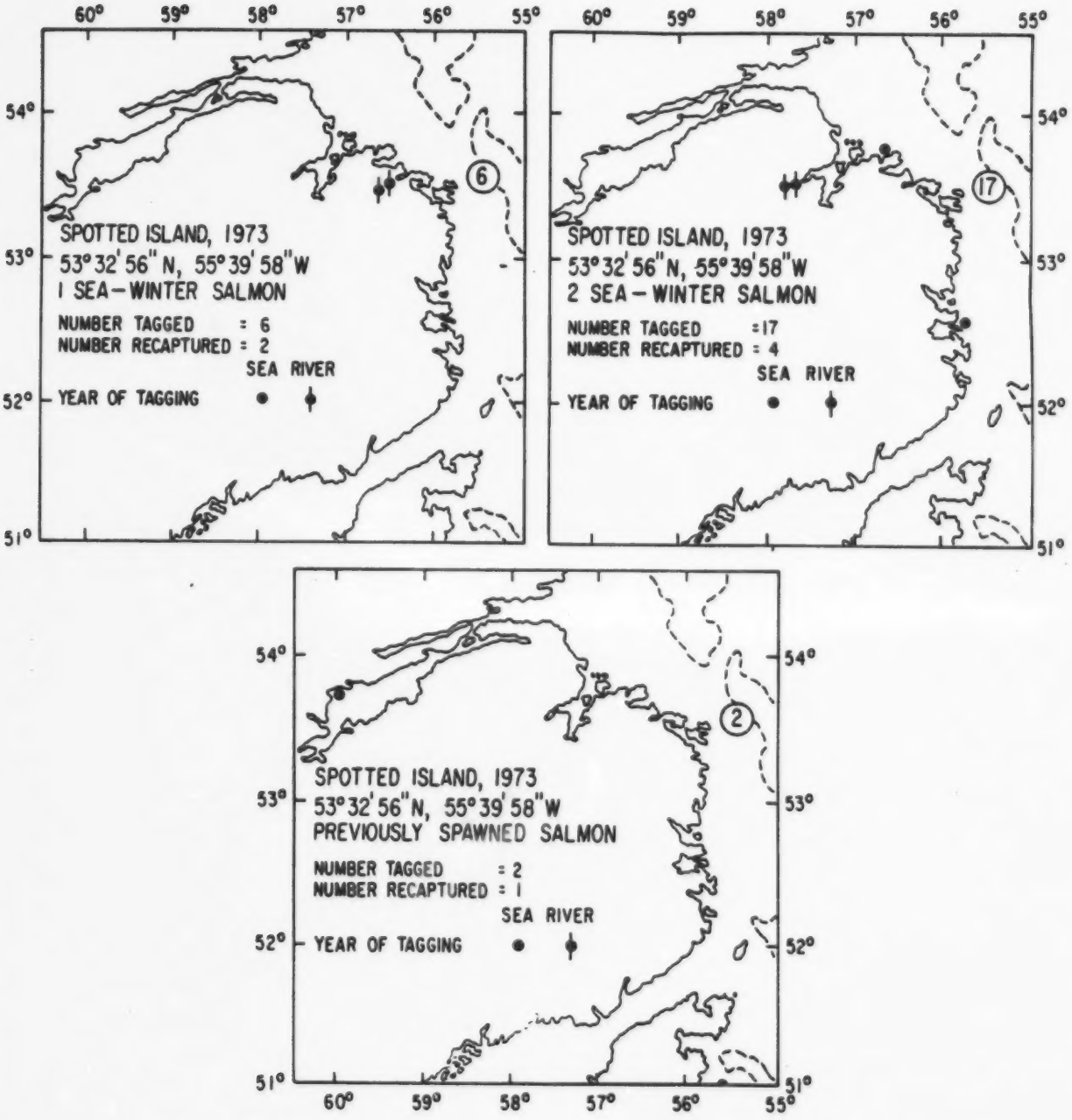

Fig. 31. The tag release and recapture locations for Atlantic salmon tagged at site 33 near Spotted Islands, Labrador in 1973.

Table 34. Summary of Atlantic salmon tagging experiment at site 34 near Black Island, Labrador in 1971. (S=sea recaptures, R=river recaptures)

1. Tagging area: Black Island, Labrador
2. Date: July 20 - 23, 1971
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
			1971	1	-	1	7	-	-	1	-	3	7	10
1	July 20 - 23	36	1972	-	-	2	-	-	-	-	-	2	-	2
2	July 20 - 21	8	1971	-	-	1	-	-	-	-	-	1	-	1
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	-	4	20	10	2	-	-	-	-	4.278	0.741
2	-	1	3	3	1	-	-	-	-	-	3.500	0.926
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	-	1	-	-	-	3.000	-	-	-	5	5	-	4.500	-	-	-	1	-	-	4.000
2	-	-	-	-	-	-	-	-	1	-	-	-	-	2.000	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

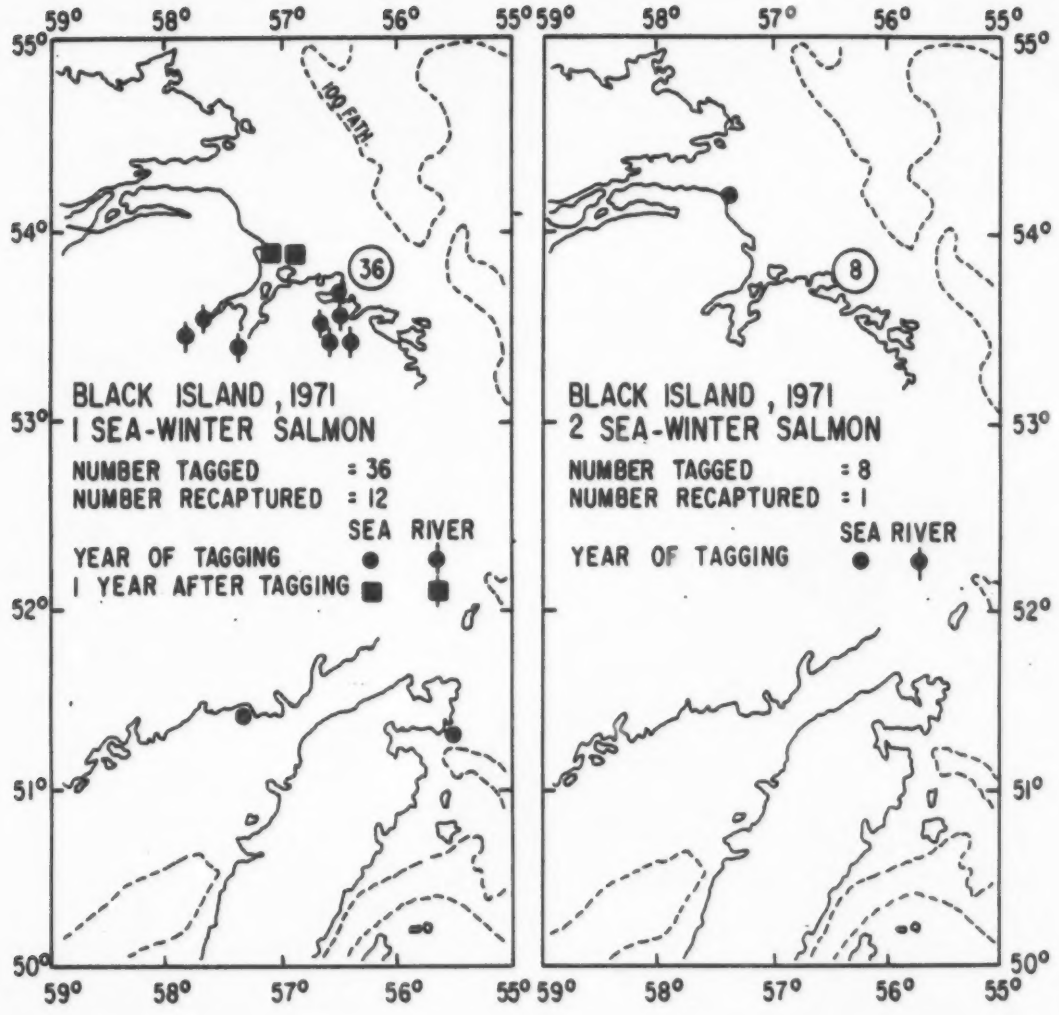

Fig. 32. The tag release and recapture locations for Atlantic salmon tagged at site 34 near Black Island, Labrador in 1971.

Table 35. Summary of Atlantic salmon tagging experiment at site 35 near Gready, Labrador in 1971. (S=sea recaptures, R=river recaptures)

1. Tagging area: Gready ($53^{o}51'53"N$; $56^{o}30'45"W$)
2. Date: July 24, 1971
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	July 24	3	1971	-	-	1	-	-	-	-	-	1	-	1
2	July 24	1		-	-	-	-	-	-	-	-	-	-	-
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	-	1	1	-	1	-	-	-	-	4.333	1.528
2	-	-	-	1	-	-	-	-	-	-	4.000	0.000
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	-	-	-	-	-	-	-	-	-	1	-	-	4.000	-	-	-	-	-	-	-
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

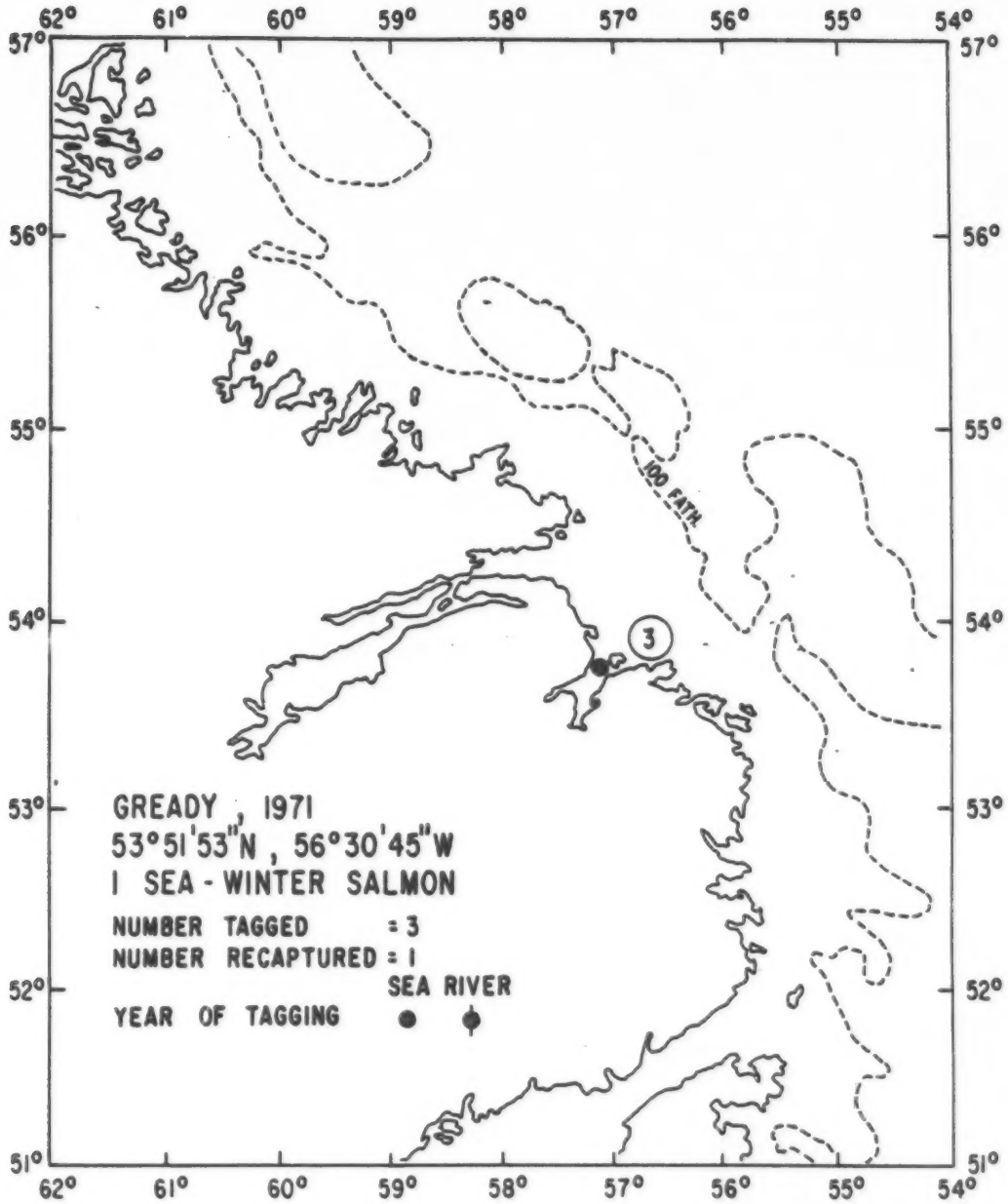

Fig. 33. The tag release and recapture locations for Atlantic salmon tagged at site 35 near Gready, Labrador in 1971.

Table 36. Summary of Atlantic salmon tagging experiment at site 36 near Gready Island, Labrador in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Gready Island (53°50'06"N; 56°23'20"W)
2. Date: June 25, 1973
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 25	3												
2	June 25	21	1973	-	-	6	3	-	-	-	-	6	3	9
3														
PS	June 25	4	1973	-	-	-	2	-	-	-	-	-	2	2

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	-	-	2	1	-	-	-	-	-	4.333	0.577
2	-	1	1	8	10	1	-	-	-	-	4.429	0.870
3												
PS	-	-	1	1	2	-	-	-	-	-	4.250	0.957

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1																					
2	-	-	-	-	-	-	-	-	-	-	4	5	-	4.556	-	-	-	-	-	-	-
3																					
PS	-	-	-	-	-	-	-	-	-	-	1	1	-	4.500	-	-	-	-	-	-	-

PS = previous spawners
S = sea
R = river

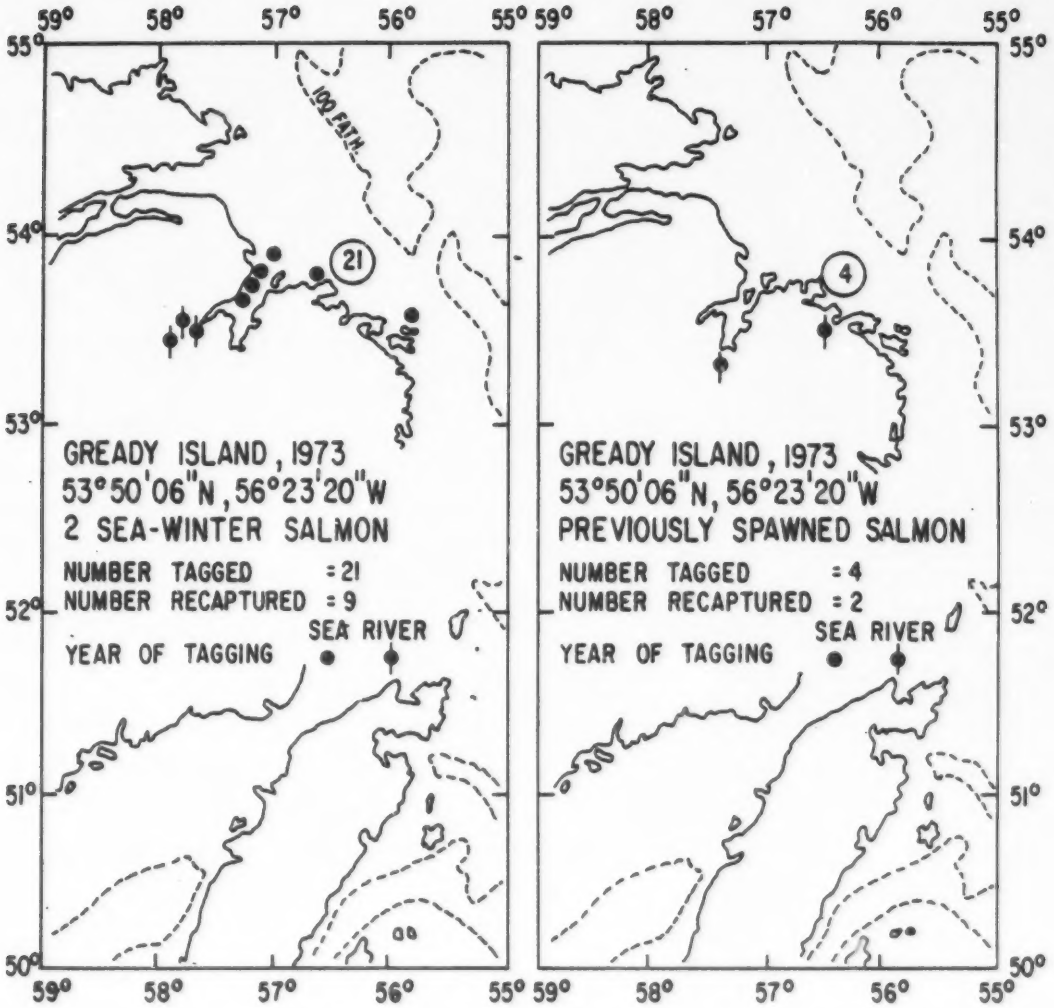

Fig. 34. The tag release and recapture locations for Atlantic salmon tagged at site 36 near Gready Island, Labrador in 1973.

Table 37. Summary of Atlantic salmon tagging experiment at site 37 near Pack's Harbour, Labrador in 1971. (S=sea recaptures, R=river recaptures)

1. Tagging area: Pack's Harbour, Labrador

2. Date: July 15 - 19, 1971

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.

5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	July 15-19	67	1971	-	1	6	9	-	-	-	-	6	10	16
			1972	-	-	2	-	-	-	-	-	2	-	2
			1973	-	-	1	-	-	-	-	-	1	-	1
2	July 15-19	11	1971	-	-	2	3	-	-	-	-	2	3	5
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	-	5	31	22	8	-	1	-	-	4.552	0.909
2	-	1	1	6	2	1	-	-	-	-	4.091	1.044
3												
PS												

Sea age	River ages of salmon recaptured in																		
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	3	4	5	6	7	8	Av.	1	2	3	4	5	6	Av.
1	-	-	1	-	-	-	3.000	1	8	5	3	-	1	4.778	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	1	3	-	1	-	-	4.200	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

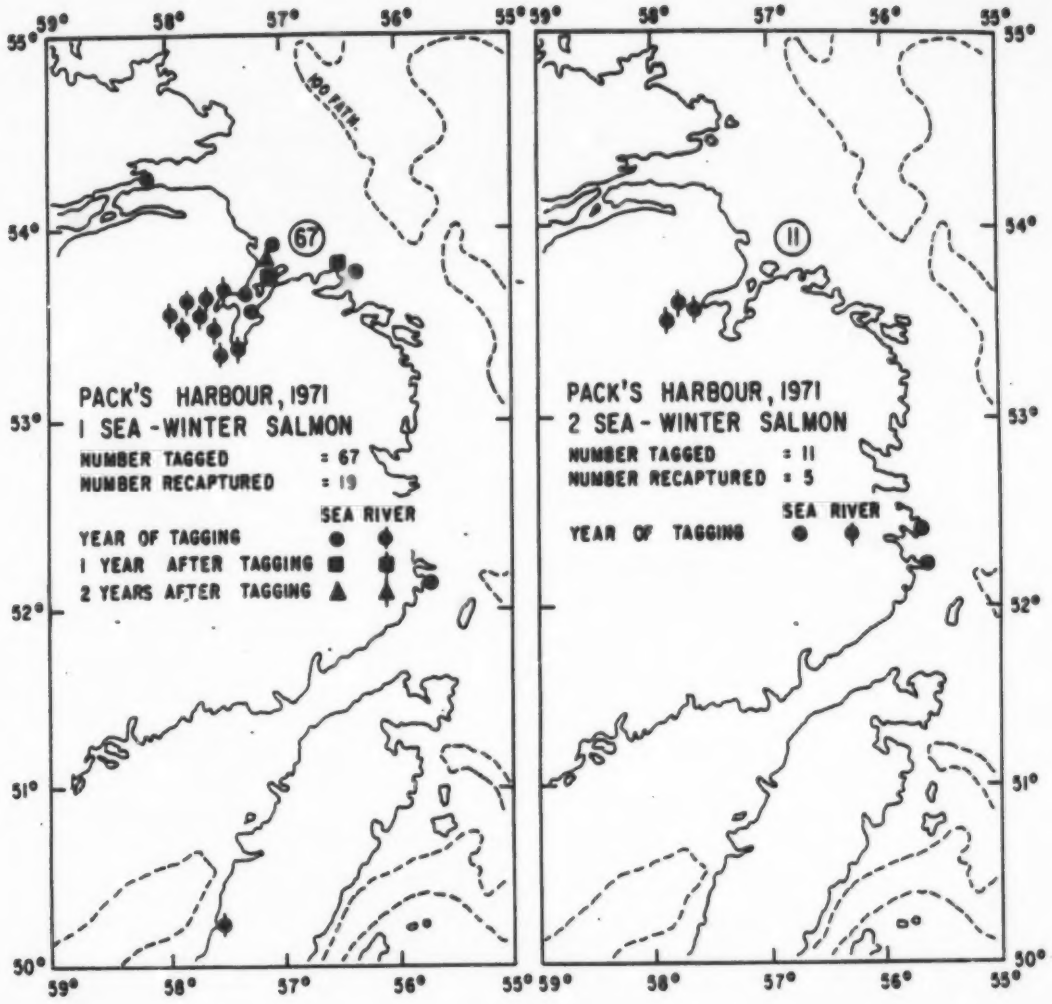

Fig. 35. The tag release and recapture locations for Atlantic salmon tagged at site 37 near Pack's Harbour, Labrador in 1971.

Table 38. Summary of Atlantic salmon tagging experiment at site 38 near Cape Porcupine, Labrador in 1971. (S=sea recaptures, R=river recaptures)

1. Tagging area: Cape Porcupine, Labrador

2. Date: July 26, 1971

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart,was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.

5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
			1971	-	-	2	1	-	-	-	-	1	1	3
1	July 26	7	1972	-	-	-	-	-	-	-	-	-	-	-
			1973	-	-	1	-	-	-	-	-	1	-	1
2	July 26	2		-	-	-	-	-	-	-	-	-	-	-
3														
PS	July 26	1		-	-	-	-	-	-	-	-	-	-	-

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	-	1	6	-	-	-	-	-	-	3.857	0.378
2	-	-	1	-	-	-	-	-	-	1	3.000	0.000
3												
PS	-	-	-	1	-	-	-	-	-	-	4.000	0.000

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	-	-	-	-	-	-	-	-	1	3	-	-	3.750	-	-	-	-	-	-	-
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

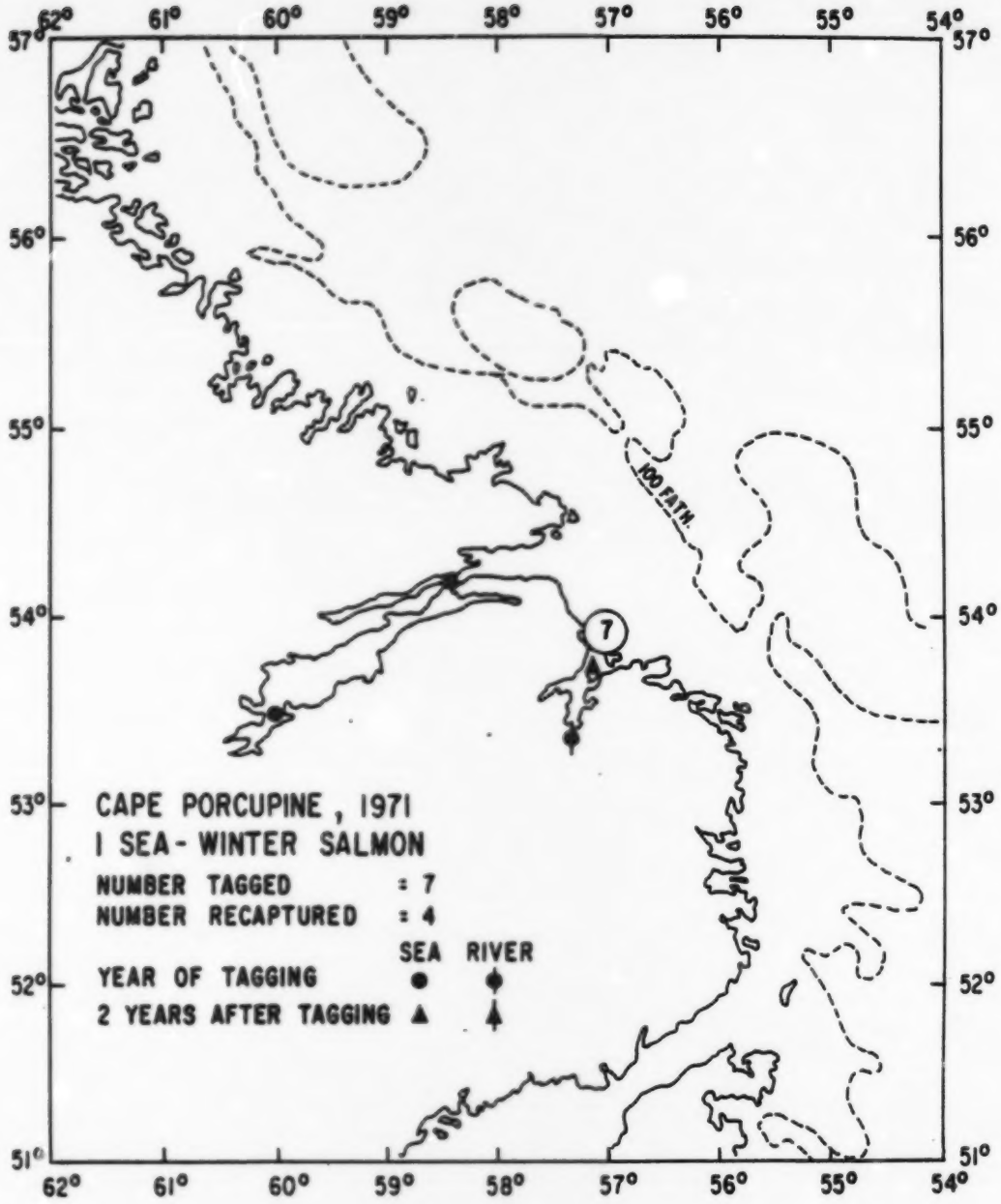

Fig. 36. The tag release and recapture locations for Atlantic salmon tagged at site 38 near Cape Porcupine, Labrador in 1971.

Table 39. Summary of Atlantic salmon tagging experiment at site 39 in Groswater Bay, Labrador in 1974. (S=sea recaptures, R=river recaptures)

1. Tagging area: Groswater Bay
2. Date: July 24 - 25, 1974
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	July 24-25	9	1974	-	-	2	1	-	-	-	-	2	1	3
			1975	-	-	-	1	-	-	-	-	-	1	1
2	July 24	1	1974	-	-	1	-	-	-	-	-	1	-	1
3	July 24	1		-	-	-	-	-	-	-	-	-	-	-
PS	July 24-25	2	1974	-	-	1	-	-	-	-	-	1	-	1

Sea age	River ages of tagged fish											
	1	2	3.	4	5	6	7	8	9	10	Av.	SD
1	-	-	1	8	-	-	-	-	-	-	3.889	0.333
2	-	-	-	1	-	-	-	-	-	-	4.000	0.000
3	-	-	-	1	-	-	-	-	-	-	4.000	0.000
PS	-	-	-	2	-	-	-	-	-	-	4.000	0.000

Sea age	River ages of salmon recaptured in																		
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	-	-	-	-	-	-	-	-	1	3	-	-	3.750	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	1	-	-	4.000	-	-	-	-	-	-	-
3																					
PS	-	-	-	-	-	-	-	-	-	-	1	-	-	4.000	-	-	-	-	-	-	-

PS = previous spawners
S = sea
R = river

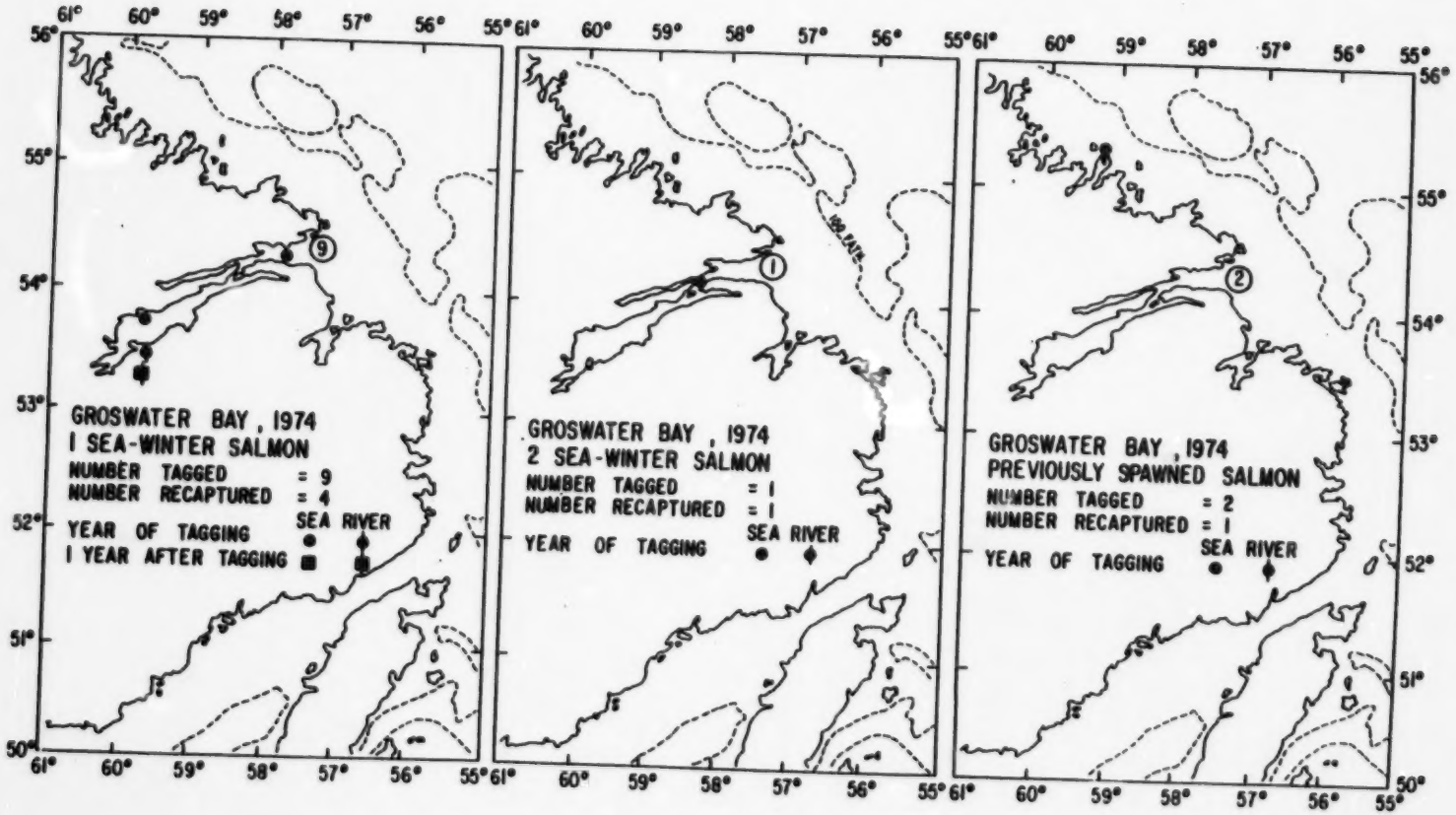

Fig. 37. The tag release and recapture locations for Atlantic salmon tagged at site 39 in Grosvater Bay, Labrador in 1974.

Table 40. Summary of Atlantic salmon tagging experiment at site 40 near Cape Makkovik, Labrador in 1974. (S=sea recaptures, R=river recaptures)

1. Tagging area: Cape Makkovik (55°12'45"N; 59°02'15"W)

2. Date: July 31, 1974

3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	July 31	4	1974	-	-	2	-	-	-	-	-	2	-	2
2	July 31	2	1974	-	-	1	-	-	-	-	-	1	-	1
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	1	-	2	1	-	-	-	-	-	3.750	1.258
2	-	-	-	1	1	-	-	-	-	-	4.500	0.707
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	-	-	-	-	-	-	-	1	-	1	-	-	3.000	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	1	-	-	4.000	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

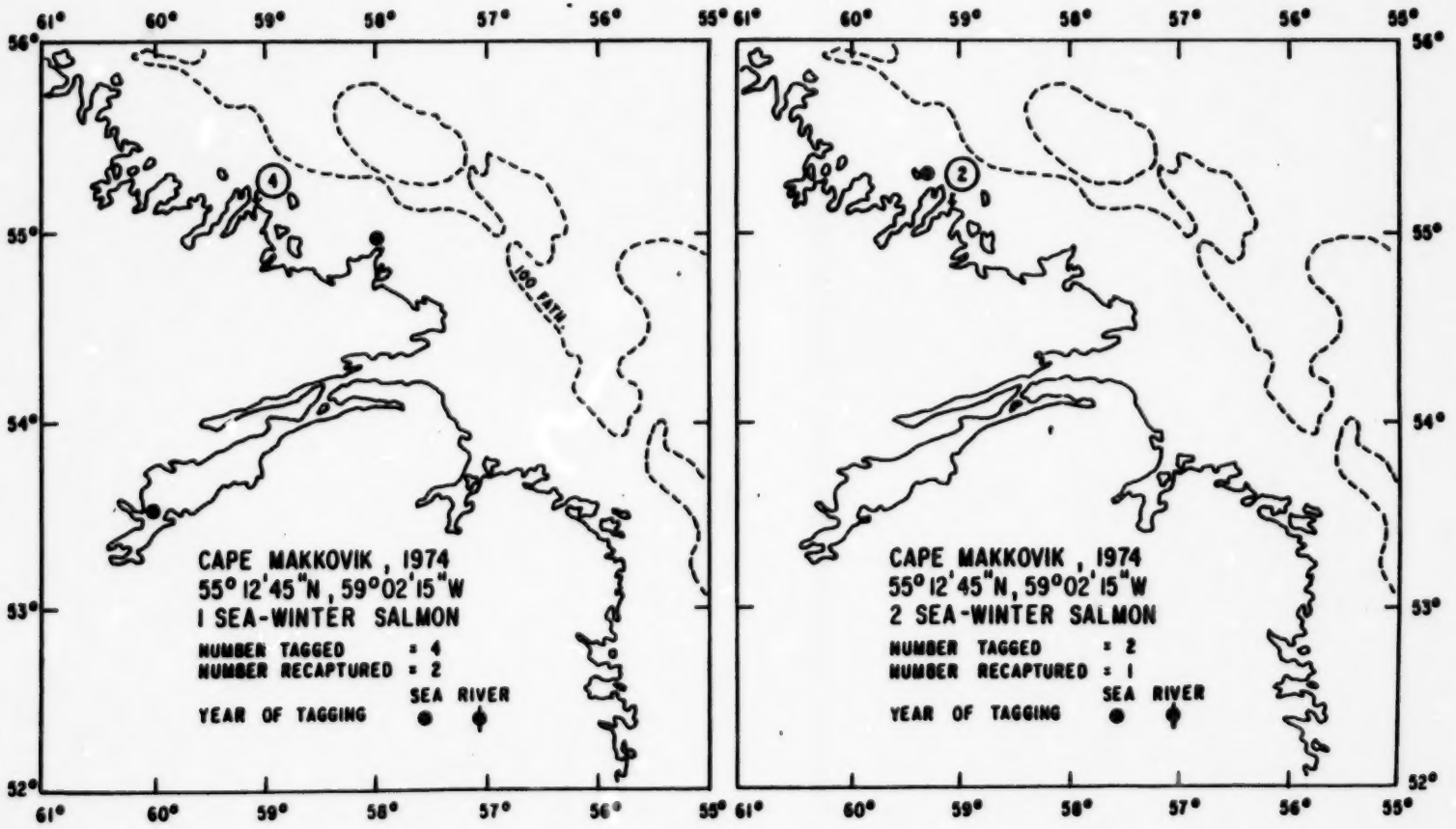

Fig. 38. The tag release and recapture locations for Atlantic salmon tagged at site 40 near Cape Makkovik, Labrador in 1974.

Table 41. Summary of Atlantic salmon tagging experiment at site 41 near the Virgin Rocks (46°36'N 51°03'W) in the Atlantic Ocean in 1973. (S=sea recaptures, R=river recaptures)

1. Tagging area: Virgin Rocks (46°35'45"N; 51°02'45"W)
2. Date: June 14, 1973
3. Type of tag: Carlin, red plastic Y-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	June 14	3	1973	1	-	-	-	-	-	-	-	1	-	1
			1974	1	-	-	-	-	-	-	-	1	-	1
2														
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	-	3	-	-	-	-	-	-	-	3.000	0.000
2												
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	-	2	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

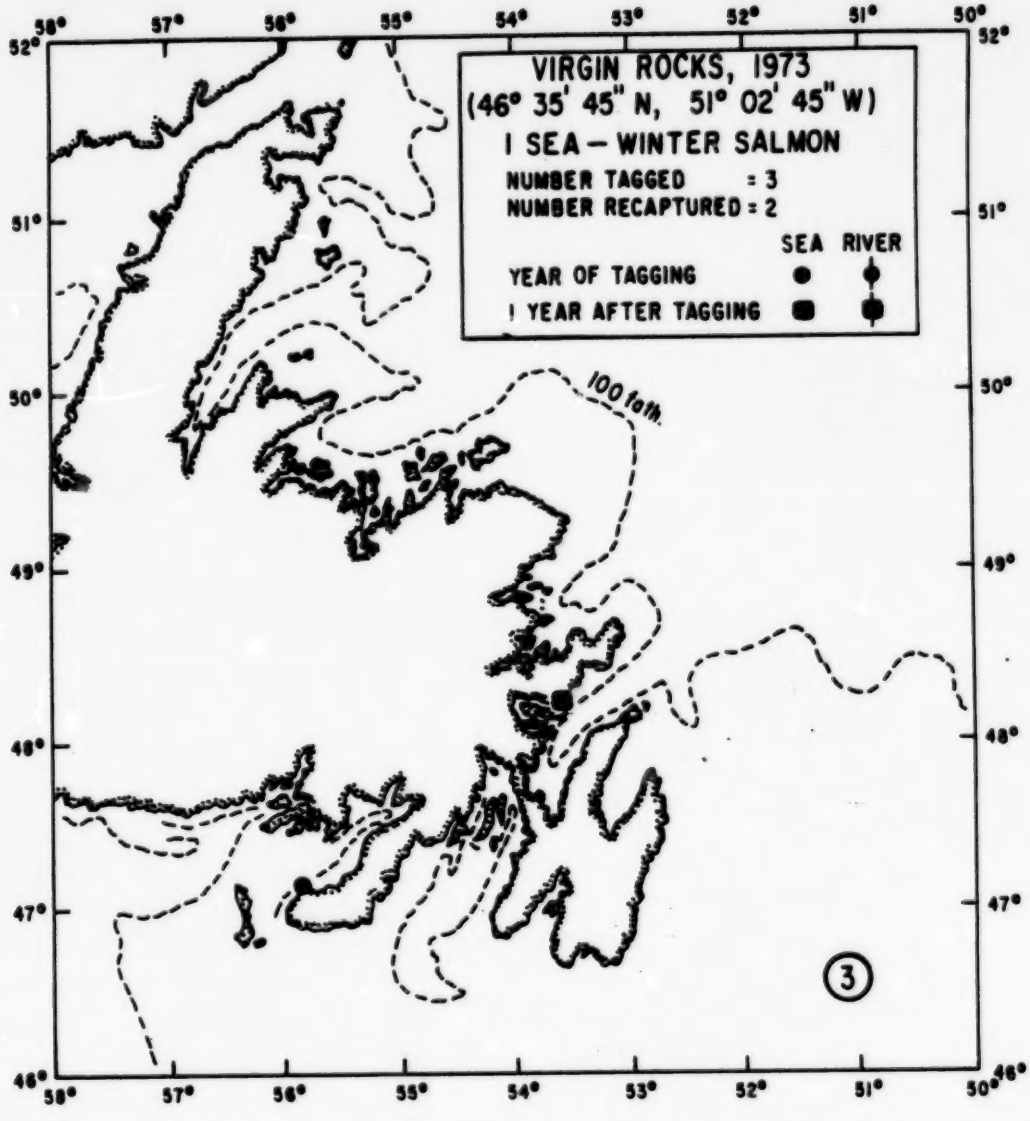
VIRGIN ROCKS, 1973
(46° 35' 45" N, 51° 02' 45" W)
1 SEA – WINTER SALMON
NUMBER TAGGED = 3
NUMBER RECAPTURED = 2
SEA RIVER
YEAR OF TAGGING
1 YEAR AFTER TAGGING
100 fath.
3
58° 57° 56° 55° 54° 53° 52° 51° 50°
52° 51° 50° 49° 48° 47° 46°

Fig. 39. The tag release and recapture locations for Atlantic salmon tagged at site 41 near the Virgin Rocks (46°36'N 51°02'04"W) in the Atlantic Ocean in 1973.

Table 42. Summary of Atlantic salmon tagging experiment at site 42 at 54°43'N 49°51'W in the Labrador Sea in 1970. (S=sea recaptures, R=river recaptures)

1. Tagging area: Labrador Sea (54°43'00"N; 49°51'00"W)
2. Date: April 16, 1970
3. Type of tag: Carlin, yellow plastic I-series, tapered tag, 42 mm x 3.5 - 5.2 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.
5. Type of gear: Baltic Longline.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	April 16	1	-	-	-	-	-	-	-	-	-	-	-	-
2	April 16	4	1970	-	-	-	-	1	-	-	-	1	-	1
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	-	1	-	-	-	-	-	-	-	3.000	0.000
2	-	1	2	1	-	-	-	-	-	-	3.000	0.817
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1																					
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000
3																					
PS																					

PS = previous spawners
S = sea
R = river

Table 43. Summary of Atlantic salmon tagging experiment at site 43 at 52°51'N 48°18'W in the Labrador Sea in 1970. (S=sea recaptures, R=river recaptures)

1. Tagging area: Labrador Sea (52°51'00"N; 48°18'00"W)
2. Date: April 19, 1970
3. Type of tag: Carlin, yellow plastic I-series, tapered tag, 42 mm x 3.5 - 5.2 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.
5. Type of gear: Salmon Driftnets.

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1														
2	April 19	10	1970	-	-	-	-	-	-	-	1	-	1	1
3														
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1												
2	-	2	4	2	1	1	-	-	-	-	3.500	1.269
3												
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1																					
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	4.000
3																					
PS																					

PS = previous spawners
S = sea
R = river

Table 44. Summary of Atlantic salmon tagging experiment at site 44 at 50°39'N 47°10'W in the Labrador Sea in 1970. (S=sea recaptures, R=river recaptures)

1. Tagging area: Labrador Sea (50°39'00"N; 47°10'00"W)
2. Date: April 21, 1970
3. Type of tag: Carlin, yellow plastic I-series, tapered tag, 42 mm x 3.5 - 5.2 mm x 0.8 mm and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.
5. Type of gear: Salmon Driftnets.

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1														
2	April 21	7	1970	-	-	-	-	1	-	-	-	1	-	1
3	April 21	1		-	-	-	-	-	-	-	-	-	-	-
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1												
2	-	-	5	-	2	-	-	-	-	-	3.571	0.976
3	-	1	-	-	-	-	-	-	-	-	2.000	0.000
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1																					
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000
3																					
PS																					

PS = previous spawners
S = sea
R = river

Table 45. Summary of Atlantic salmon tagging experiment at site 45 at 54°49'30"N 50°23'W in the Labrador Sea in 1971. (S=sea recaptures, R=river recaptures)

1. Tagging area: Labrador Sea (54°49'30"N; 50°23'00"W)

2. Date: May 12, 1971

3. Type of tag: Carlin, yellow plastic X-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.

5. Type of gear: Baltic Longline.

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1														
2	May 12	2	1971	1	-	-	-	-	-	-	-	1	-	1
3														
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1												
2	-	-	2	-	-	-	-	-	-	-	3.000	0.000
3												
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1																					
2	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

Table 46. Summary of Atlantic salmon tagging experiment at site 46 at 52°54'20"N 48°37'W in the Labrador Sea in 1971. (S=sea recaptures, R=river recaptures)

1. Tagging area: Labrador Sea (52°54'20"N; 48°37'00"W)
2. Date: May 16, 1971
3. Type of tag: Carlin, yellow plastic X-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.
5. Type of gear: Baltic Longline.

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1														
2	May 16	15	1971	2	-	-	-	1	-	-	-	3	-	3
3														
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1												
2	-	3	9	3	-	-	-	-	-	-	3.000	0.655
3												
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1																					
2	-	1	1	-	-	-	2.500	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000
3																					
PS																					

PS = previous spawners
S = sea
R = river

Table 47. Summary of Atlantic salmon tagging experiment at site 47 at 52°47'30"N 48°30'30"W in the Labrador Sea in 1971. (S=sea recaptures, R=river recaptures)

1. Tagging area: Labrador Sea (52°47'30"N; 48°30'30"W)
2. Date: May 18, 1971
3. Type of tag: Carlin, yellow plastic X-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.
4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.
5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	May 18	1		-	-	-	-	-	-	-	-	-	-	-
2	May 18	10	1971	1	-	-	-	-	-	1	-	2	-	2
3														
PS	May 18	1		-	-	-	-	-	-	-	-	-	-	-

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	?	Av.	SD
1	-	1	-	-	-	-	-	-	-	-	2.000	0.000
2	-	2	3	3	-	-	-	-	-	2	3.125	0.835
3												
PS	-	-	-	-	-	-	-	-	-	1	-	-

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec							
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	?	Av.
1																						
2	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
3																						
PS																						

PS = previous spawners
S = sea
R = river

Table 48. Summary of Atlantic salmon tagging experiment at site 48 at 52°53'10"N 48°36'25"W in the Labrador Sea in 1971. (S=sea recaptures, R=river recaptures)

1. Tagging area: Labrador Sea (52°53'10"N; 48°36'25"W)

2. Date: May 19, 1971

3. Type of tag: Carlin, yellow plastic X-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.

5. Type of gear: Baltic Longline.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1														
2	May 19	4	1971	1	-	-	-	-	-	-	-	1	-	1
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1												
2	-	2	2	-	-	-	-	-	-	-	2.500	0.577
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Maritimes & Quebec						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1																					
2	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

Table 49. Summary of Atlantic salmon tagging experiment at site 49 near Cape Bonavista, Newfoundland in 1971. (S=sea recaptures, R=river recaptures)

1. Tagging area: Off Cape Bonavista (48°41'15"N; 52°09'15"W)

2. Date: May 25, 1971

3. Type of tag: Carlin, yellow plastic X-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.

5. Type of gear: Baltic Longline

Sea age	Release data: Date tagged	Release data: No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1														
2	May 25	2	1971	1	-	-	-	-	-	-	-	1	-	1
3														
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1												
2	-	-	2	-	-	-	-	-	-	-	3.000	0.000
3												
PS												

Sea age	River ages of salmon recaptured in: Newfoundland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1																					
2	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3																					
PS																					

PS = previous spawners
S = sea
R = river

Table 50. Summary of Atlantic salmon tagging experiment at site 50 at 58°09'N 52°26'30"W in the Labrador Sea in 1971. (S=sea recaptures, R=river recaptures)

1. Tagging area: Labrador Sea (58°09'00"N; 52°26'30"W)

2. Date: September 22, 1971

3. Type of tag: Carlin, yellow plastic X-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
Sea age	Date tagged	No. tagged	of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Ireland S	Ireland R	Total S	Total R	Grand total
1	September 22	3	1971	-	-	-	-	-	-	-	-	-	-	-
			1972	-	-	-	-	-	-	1	-	1	-	1
			1973	-	-	-	-	-	-	-	-	-	-	-
2														
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	10	Av.	SD
1	-	2	1	-	-	-	-	-	-	-	2.333	0.577
2												
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							Ireland					
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2.000
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

Table 51. Summary of Atlantic salmon tagging experiment at site 51 at 56°48'45"N 50°25'W in the Labrador Sea in 1972. (S=sea recaptures, R=river recaptures)

1. Tagging area: Labrador Sea (56°48'45"N; 50°25'00"W)

2. Date: August 9, 1972

3. Type of tag: Carlin, yellow plastic X-series, 15 mm x 5 mm x 0.8 mm, and wired with Type 316 soft stainless steel 0.4 mm diameter wire.

4. Method of attachment: A double needle, approximately 8 mm apart, was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the right side of fish.

5. Type of gear: Salmon Driftnets.

Release data			Year	Number recaptured										
				Nfld.		Labrador		Maritimes		West Greenland		Total		Grand
Sea age	Date tagged	No. tagged	of recapture	S	R	S	R	S	R	S	R	S	R	total
1	August 9	16	1973	1	-	-	-	-	-	1	-	2	-	2
2	August 9	1		-	-	-	-	-	-	-	-	-	-	-
3														
PS														

Sea age	River ages of tagged fish											
	1	2	3	4	5	6	7	8	9	?	AV.	SD
1	1	2	10	1	1	-	-	-	-	1	2.933	0.884
2	-	-	-	-	-	-	-	-	-	1	-	-
3												
PS												

Sea age	River ages of salmon recaptured in																			
	Newfoundland							Labrador							West Greenland						
	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.	1	2	3	4	5	6	Av.
1	-	-	1	-	-	-	3.000	-	-	-	-	-	-	-	-	-	1	-	-	-	3.000
2																					
3																					
PS																					

PS = previous spawners
S = sea
R = river

Table 52. Summary of Atlantic salmon tagging experiment at site 52 in the Labrador Sea in 1977. (S=sea recaptures, R=river recaptures)

1. Tagging area: Labrador Sea

2. Date: October 9 - October 17, 1977

3. Type of tag: Carlin, yellow plastic Y-series, 15 mm x 5 mm x 0.8 mm and wired with Type 316 soft stainless steel 0.3 mm diameter wire.

4. Method of attachment: A double needle approximately 8 mm apart was inserted through the dorsal musculature just below the anterior part of the dorsal fin. The tag hung from the left side of fish.

5. Type of gear: Salmon driftnets.

Sea age	Release data: Date tagged	No. tagged	Year of recapture	Number recaptured: Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Scotland S	Scotland R	Total S	Total R	Grand total
1	Oct. 9 - Oct. 17	31	1977 1978								1		1	1
2														
3														
PS														

Sea age	River ages of tagged fish: 1	2	3	4	5	6	7	8	9	10	Av.	SD
1	5	7	8	4	5	2	-	-	-	-	3.097	1.5134
2												
3												
PS												

Sea age	River ages of salmon recaptured in: Scotland 1	2	3	4	5	6	Av.	Labrador 1	2	3	4	5	6	Av.	Maritimes & Quebec 1	2	3	4	5	6	Av.
1		1					2.000														
2																					
3																					
PS																					

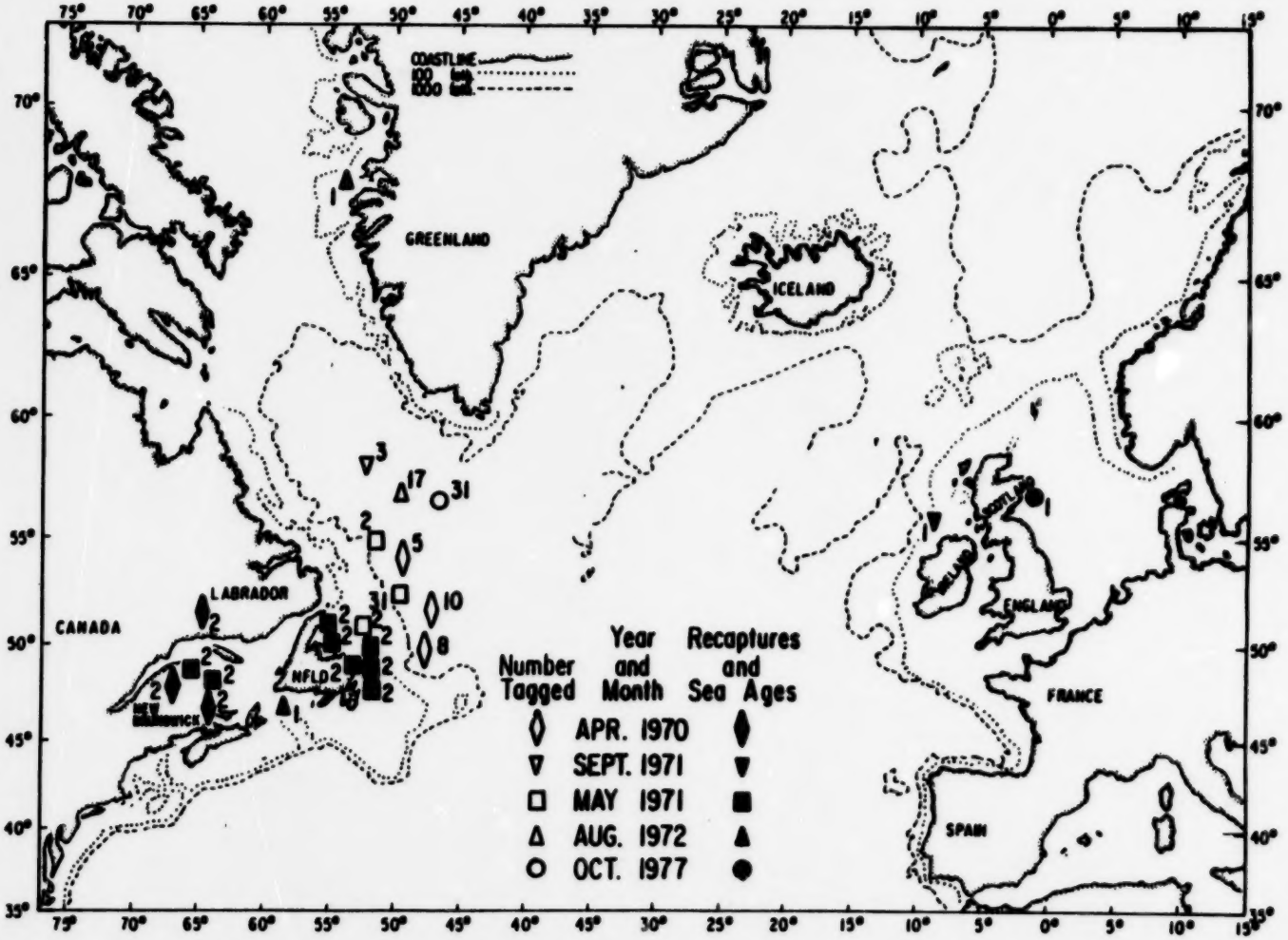

Fig. 40. The tag release and recapture locations for Atlantic salmon tagged at sites 42-52 in the Labrador Sea from 1970 to 1977. The numbers beside the open symbols (tagging sites) are the number tagged and released; whereas, the numbers beside the solid symbols (recapture sites) are the sea ages of the salmon when tagged.

Table 53. Summary of recaptures from Atlantic salmon experiments 1-27 in insular Newfoundland from 1940 to 1977. (S=sea recaptures, R=river recaptures)

Release data			Recaptures												
			Nfld.		Labrador		Maritimes		Quebec		West Greenland		Total		Grand
Sea age	No. tagged	Year of recapture	S	R	S	R	S	R	S	R	S	R	S	R	total
1	1749	N	358	28	1	-	9	18	2	-	-	-	370	46	416
		N+1	21	2	-	-	-	3	-	-	-	-	21	5	26
		N+2	5	-	-	-	-	1	-	-	-	-	5	1	6
		N+3	1	-	-	-	-	-	-	-	-	-	1	-	1
2	986	N	129	8	2	1	50	18	21	26	-	-	202	53	255
		N+1	4	-	-	-	1	7	2	1	1	-	8	8	16
3	72	N	3	-	-	-	7	-	2	3	-	-	12	3	15
		N+1	-	-	1	-	-	-	2	-	-	-	3	-	3
		N+2	-	-	-	-	-	-	1	-	-	-	1	-	1
4	2	N	1	-	-	-	1	-	-	-	-	-	2	-	2
PS	114	N	10	-	-	-	7	2	3	1	-	-	20	3	23
		N+1	2	-	-	-	-	1	1	-	-	-	3	1	4
Total	2923	All	534	38	4	1	75	50	34	31	1	-	648	120	768

Table 54. Summary of recaptures from Atlantic salmon tagging experiments 28-40 in Labrador from 1948 to 1974. (S=sea recaptures, R=river recaptures)

Release data			Recaptures										
Sea age	No. tagged	Year of recapture	Nfld. S	Nfld. R	Labrador S	Labrador R	Maritimes S	Maritimes R	Quebec S	Quebec R	Total S	Total R	Grand total
1	219	N	3	1	20	21	-	-	1	-	24	22	46
		N+1	-	-	4	1	-	-	-	-	4	1	5
		N+2	-	-	2	-	-	-	-	-	2	-	2
2	220	N	1	1	38	8	-	-	-	-	39	9	48
3	4	N	-	-	-	-	-	-	-	-	-	-	-
PS	17	N	-	-	3	3	-	-	-	-	3	3	6
Total	460	All	4	2	67	33	-	-	1	-	72	35	107

Table 55. Summary of recaptures from Atlantic salmon tagging experiments 41-52 in Labrador Sea and Virgin Rocks from 1970 to 1977. (S=sea recaptures, R=river recaptures)

Release data			Recaptures														
											West						
Sea age	No. tagged	Year of recapture	Nfld. S	Nfld. R	Maritimes S	Maritimes R	Quebec S	Quebec R	Ireland S	Ireland R	Greenland S	Greenland R	Scotland S	Scotland R	Total S	Total R	Grand total
							LABRADOR SEA										
1	52	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		N+1	1	-	-	-	-	-	1	-	1	-	-	1	3	1	4
2	55	N	6	-	3	-	1	1	-	-	-	-	-	-	10	1	11
3	1	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS	1	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	109	All	7	-	3	-	1	1	1	-	1	-	-	1	13	2	15
							VIRGIN ROCK										
1	3	N	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1
		N+1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Total	3	All	2	-	-	-	-	-	-	-	-	-	-	-	2	-	2

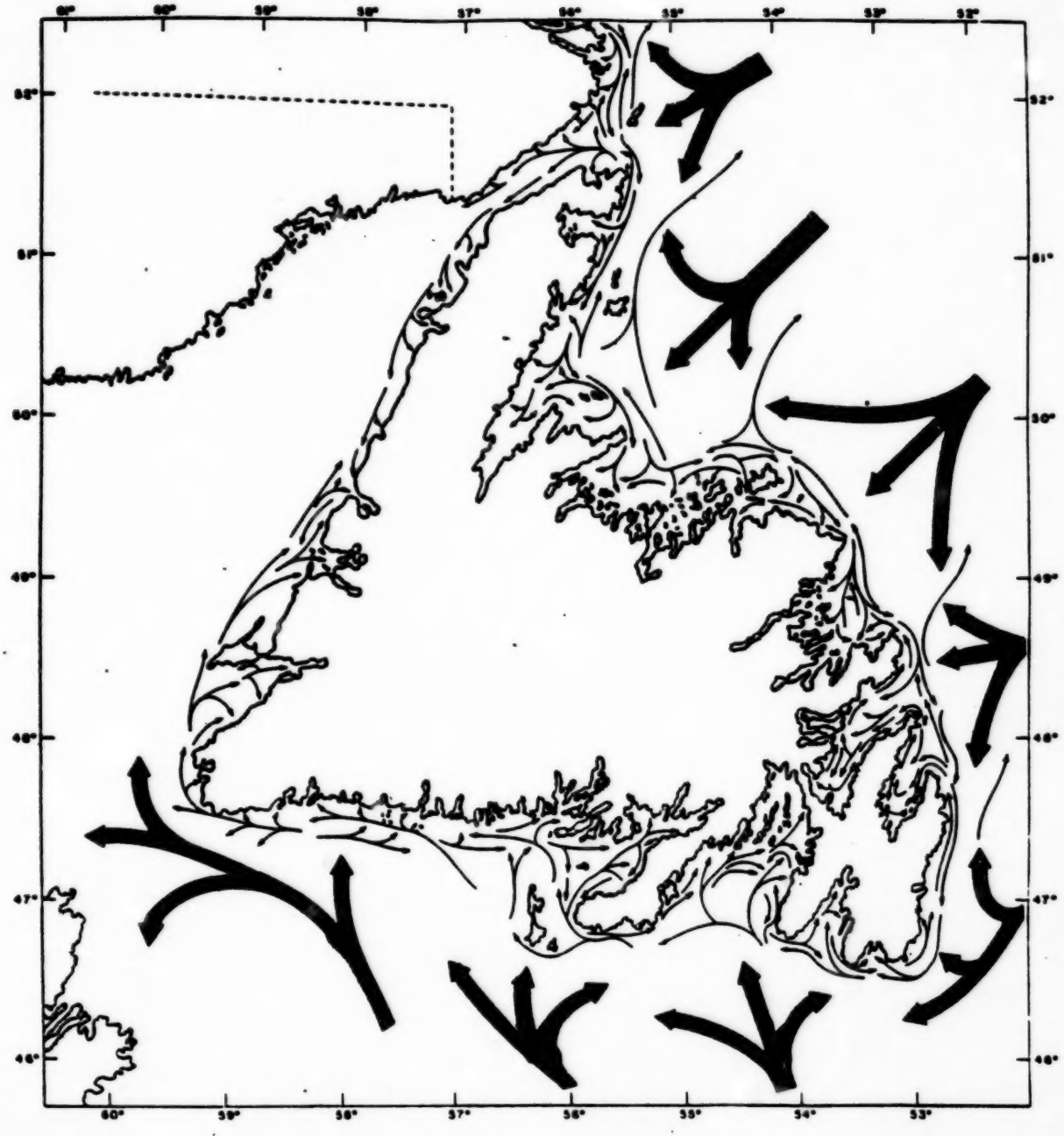

Fig. 41. Movements of salmon in Newfoundland's coastal waters. This map does not show the main migration routes of specific stocks of salmon in these waters but rather a combination of many different migratory patterns. Movements of kelts, particularly along the west coast are not necessarily depicted. This figure was taken from Pippy (1982).